

Forecast for: PAFA (FAIRBANKS, AK, US)

Text: PAFA 131128Z 131212 35005KT P6SM SCT040 SCT080 SCT200

Forecast period: 1200 to 2200 UTC 13 April 2008

Forecast type: FROM: standard forecast or significant change

Winds: from the N (350 degrees) at 6 MPH (5 knots; 2.6 m/s)

Visibility: 6 or more miles (10+ km)

Clouds: scattered clouds at 4000 feet AGL

scattered clouds at 8000 feet AGL

scattered clouds at 20000 feet AGL

Weather: no significant weather forecast for this period

Text: FM2200 11005KT P6SM BKN100

Forecast period: 2200 UTC 13 April 2008 to 0200 UTC 14 April 2008

Forecast type: FROM: standard forecast or significant change

Winds: from the ESE (110 degrees) at 6 MPH (5 knots; 2.6 m/s)

Visibility: 6 or more miles (10+ km)

Ceiling: 10000 feet AGL

Clouds: broken clouds at 10000 feet AGL

Weather: no significant weather forecast for this period

Text: FM0200 22005KT 5SM -SN BKN025

Forecast period: 0200 to 1200 UTC 14 April 2008

Forecast type: FROM: standard forecast or significant change

Winds: from the SW (220 degrees) at 6 MPH (5 knots; 2.6 m/s)

Visibility: 5 miles (8 km)

Ceiling: 2500 feet AGL

Clouds: broken clouds at 2500 feet AGL

Weather: -SN (light snow)

Forecast for: PABR (BARROW, AK, US)

Text: PABR 131623Z 131612 10010KT 1SM BR BKN001 OVC005

Forecast period: 1600 to 1900 UTC 13 April 2008

Forecast type: FROM: standard forecast or significant change

Winds: from the E (100 degrees) at 12 MPH (10 knots; 5.2 m/s)

Visibility: 1.00 miles (1.61 km)

Ceiling: 100 feet AGL

Clouds: broken clouds at 100 feet AGL

overcast cloud deck at 500 feet AGL

Weather: BR (mist)

Text: TEMPO 1619 1/2SM FG

Forecast period: 1600 to 1900 UTC 13 April 2008

Forecast type: TEMPORARY: The following changes expected for less than half the time period

Visibility: 0.50 miles (0.80 km)

Weather: FG (fog)

Text: FM1900 09015KT 5SM BR SCT001 OVC005

Forecast period: 1900 UTC 13 April 2008 to 1200 UTC 14 April 2008

Forecast type: FROM: standard forecast or significant change

Winds: from the E (90 degrees) at 17 MPH (15 knots; 7.8 m/s)

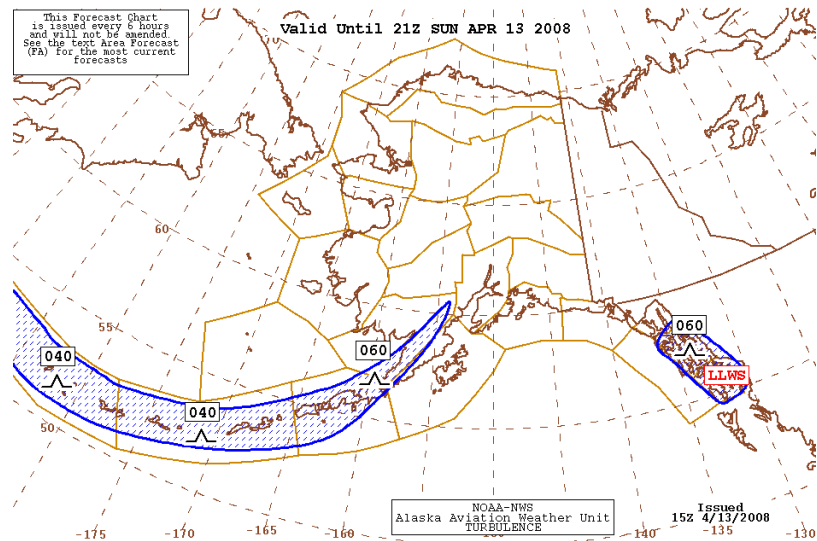
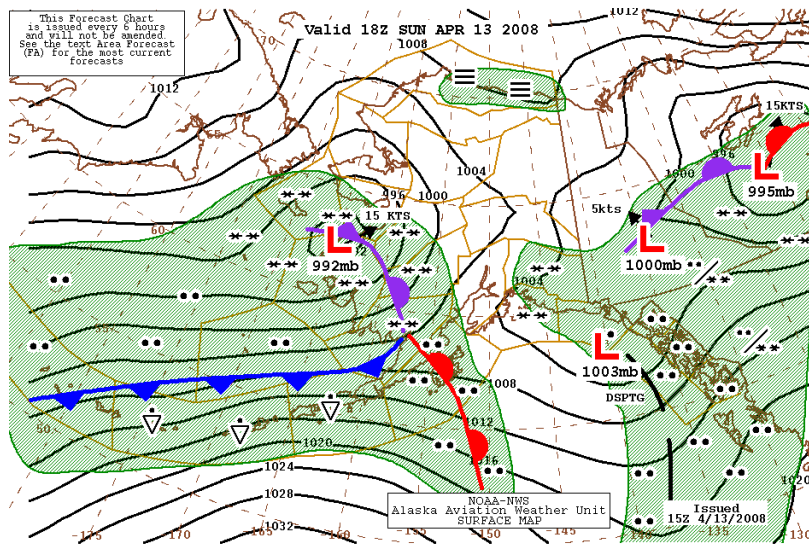
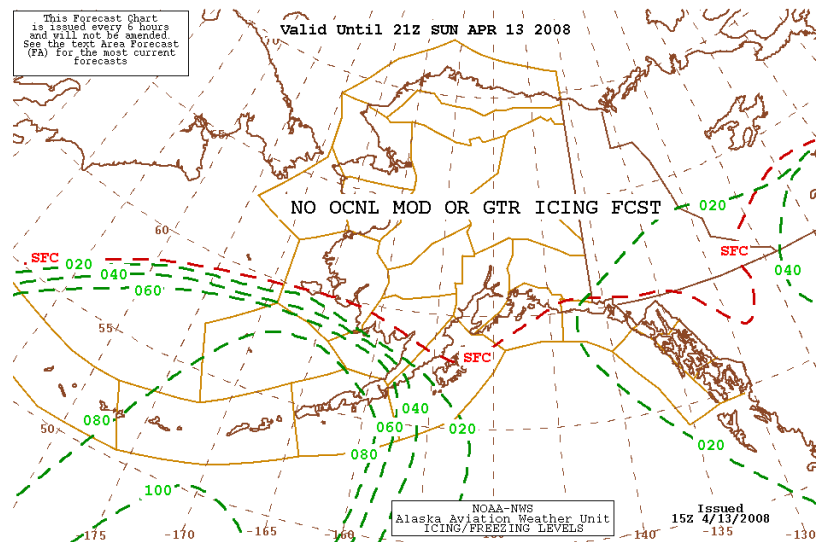
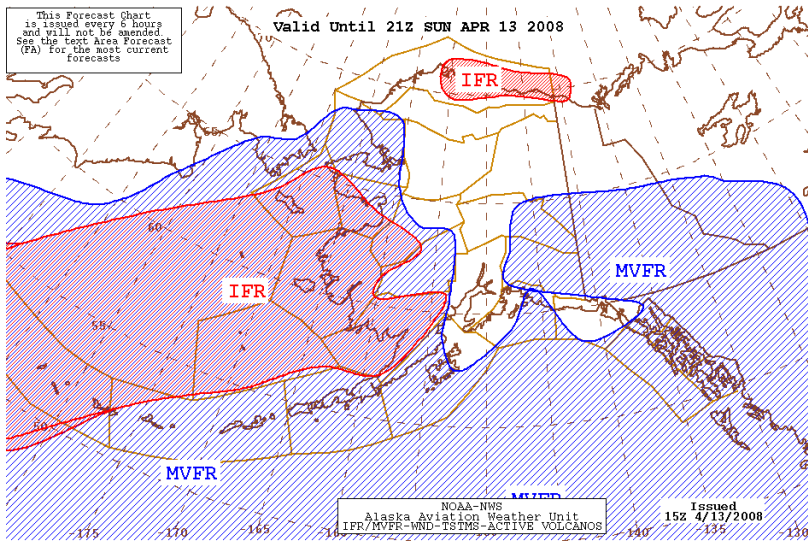
Visibility: 5 miles (8 km)

Ceiling: 500 feet AGL

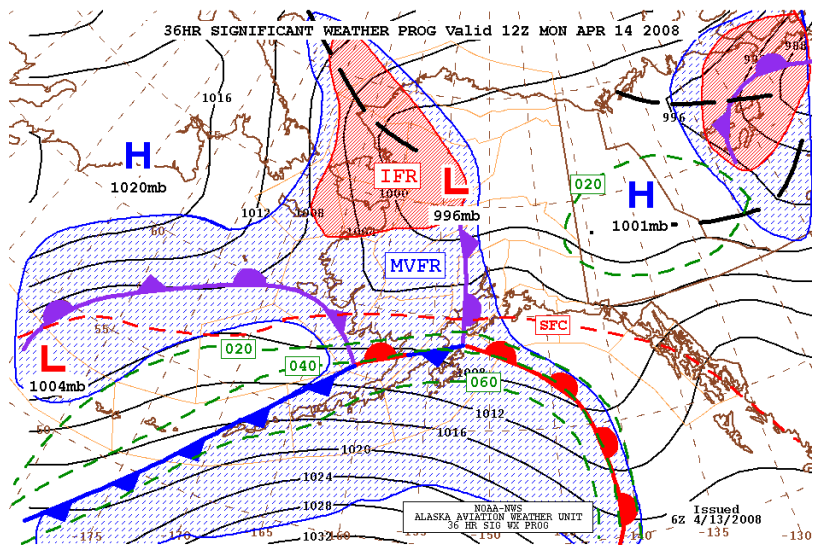
Clouds: scattered clouds at 100 feet AGL

overcast cloud deck at 500 feet AGL

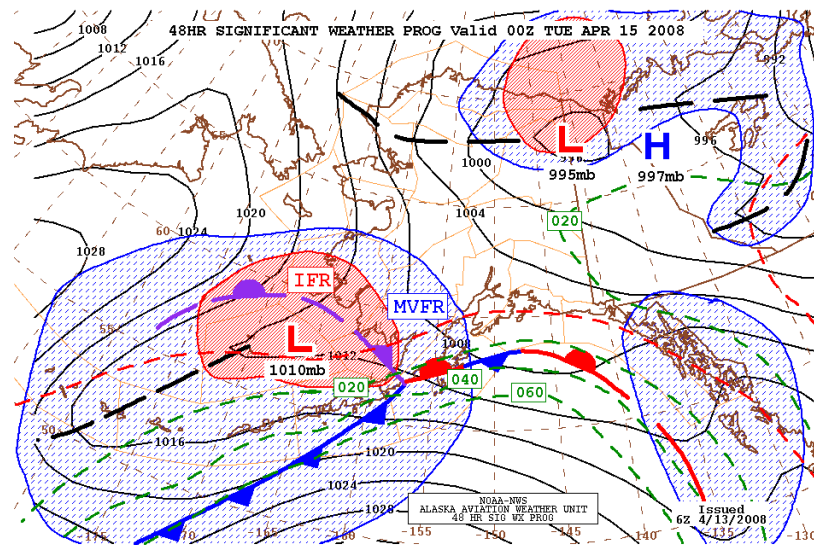
Weather:



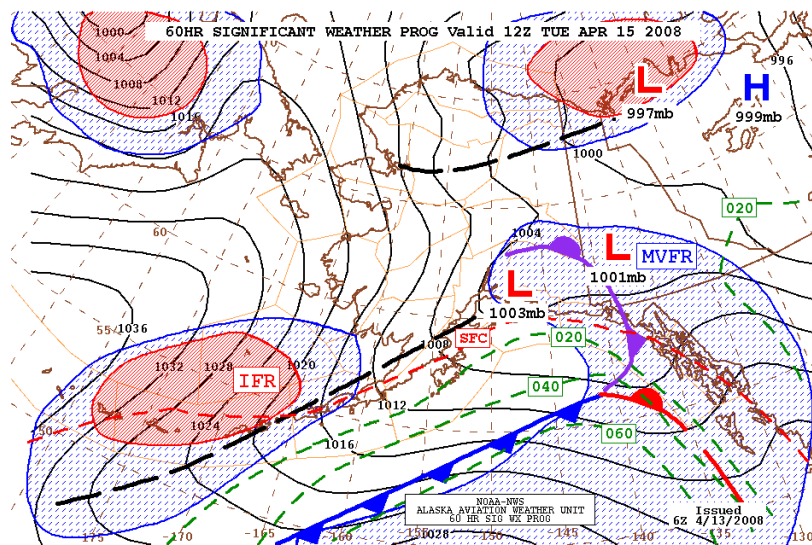
080413/1800V006 SFC SHSEMSL



4 AM Monday



4 PM Monday



4 AM Tuesday

AKZ221-140200-
CENTRAL INTERIOR-
INCLUDING...NENANA...ANDERSON...TANANA...MINTO...MANLEY HOT
SPRINGS...RAMPART...LAKE MINCHUMINA...LIVENGOOD
352 AM ADT SUN APR 13 2008

.TODAY...INCREASING CLOUDS WITH SNOW IN THE AFTERNOON. SNOW ACCUMULATION AROUND 1 INCH. HIGHS 30 TO 35. LIGHT WINDS BECOMING SOUTHEAST WINDS TO 15 MPH.

.TONIGHT...SNOW. PATCHY FOG. ADDITIONAL SNOW ACCUMULATION OF 2 TO 3 INCHES. LOWS 15 TO 20. SOUTHEAST WINDS 10 TO 20 MPH BECOMING SOUTHWEST WINDS 15 TO 25 MPH GUSTING TO 35 MPH AFTER MIDNIGHT FROM LAKE MINCHUMINA SOUTH WITH LOCAL BLOWING SNOW.

.MONDAY...SNOW LIKELY. SNOW ACCUMULATION UP TO 2 INCHES. HIGHS 30 TO 35. WEST WINDS 10 TO 25 MPH.

.MONDAY NIGHT...MOSTLY CLOUDY. CHANCE OF SNOW. LOWS ZERO TO 15 ABOVE. WEST WINDS 10 TO 15 MPH.

.TUESDAY...MOSTLY CLOUDY. CHANCE OF SNOW. HIGHS 20 TO 25. WEST WINDS 10 TO 15 MPH.

.TUESDAY NIGHT...MOSTLY CLOUDY. CHANCE OF SNOW. LOWS NEAR 10 ABOVE.

.WEDNESDAY...MOSTLY CLOUDY. CHANCE OF SNOW. HIGHS NEAR 25.

.WEDNESDAY NIGHT...MOSTLY CLOUDY. CHANCE OF SNOW. LOWS NEAR 10 ABOVE.

.THURSDAY...PARTLY CLOUDY. HIGHS NEAR 25.

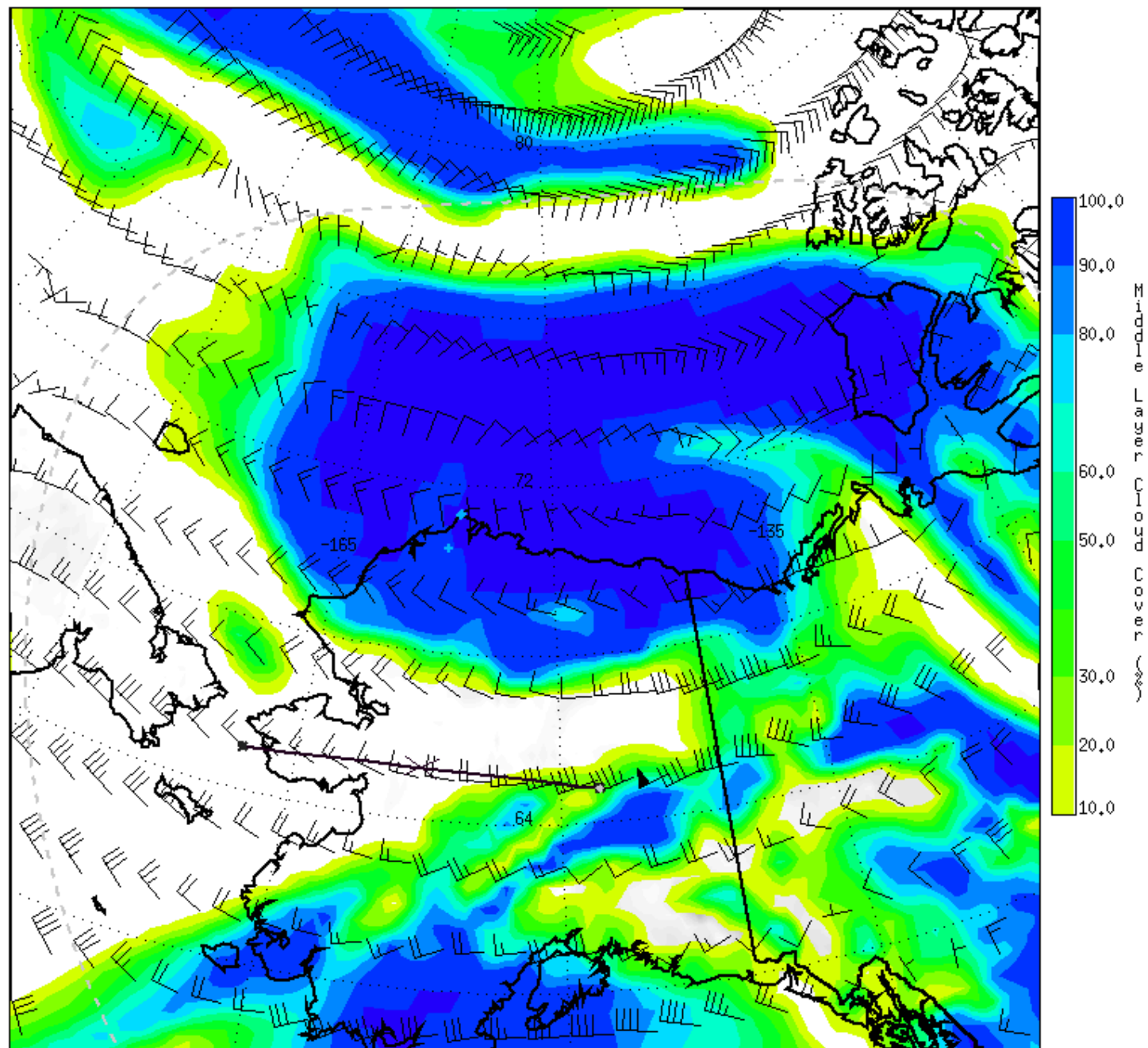
.THURSDAY NIGHT...MOSTLY CLOUDY. LOWS NEAR 10 ABOVE.

.FRIDAY...MOSTLY CLOUDY. HIGHS NEAR 30.

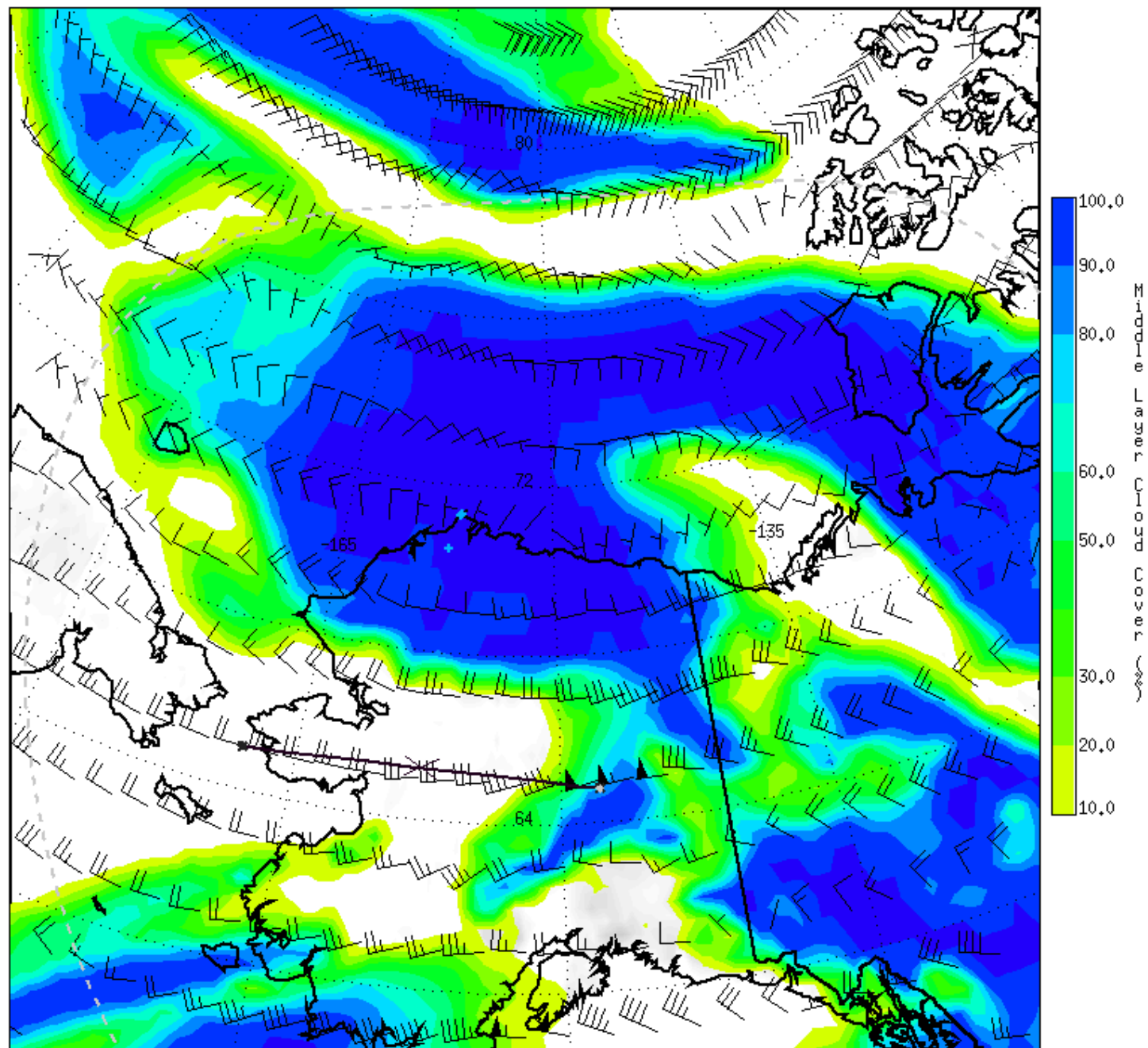
.FRIDAY NIGHT...MOSTLY CLOUDY WITH A CHANCE OF SNOW. LOWS NEAR 20.

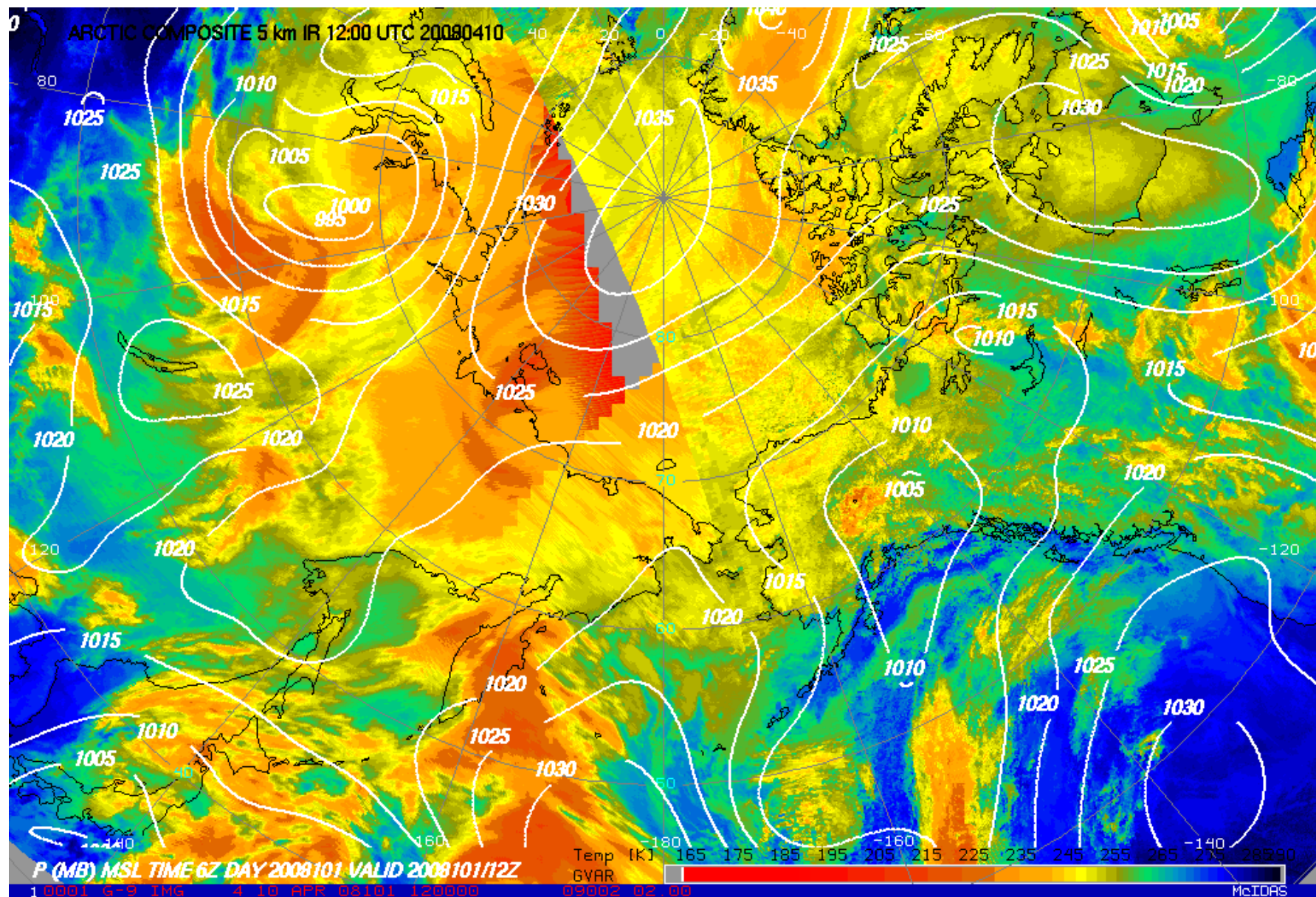
.SATURDAY...MOSTLY CLOUDY WITH A CHANCE OF SNOW. HIGHS NEAR 35.

NCEP GFS Wind Flags (knots) on Press = 700. hPa
Init:2008041306 Valid:2008041506

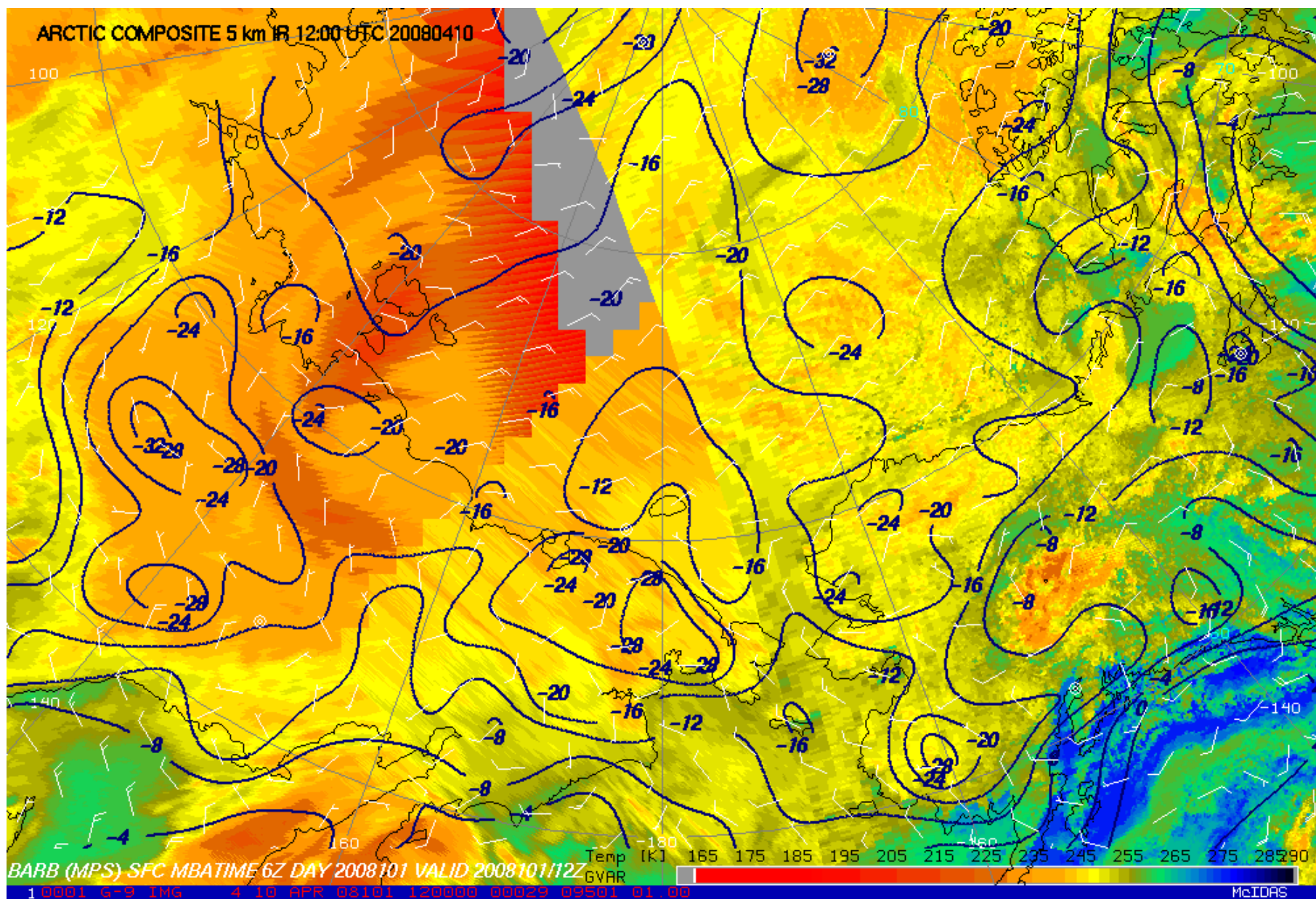


NCEP GFS Wind Flags (knots) on Press = 700. hPa
Init:2008041306 Valid:2008041500



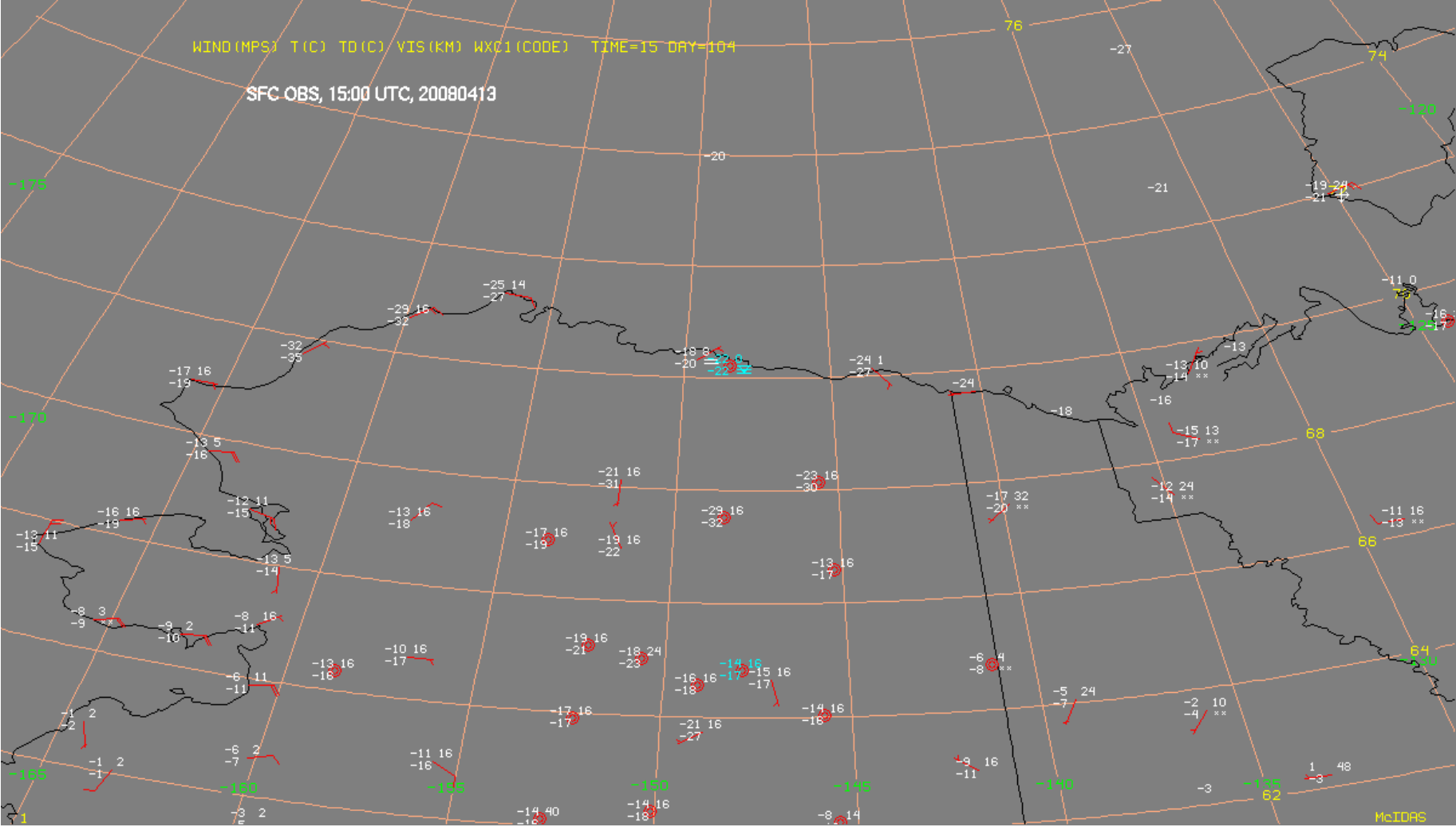


ARCTIC COMPOSITE 5 km IR 12:00 UTC 20080410



BARB (MPS) SFC MBATIME 6Z DAY 2008101 VALID 2008101/12Z
10001 6-9 1MG 4 10 APR 08101 120000 00029 09501 01 00

NCIDRS



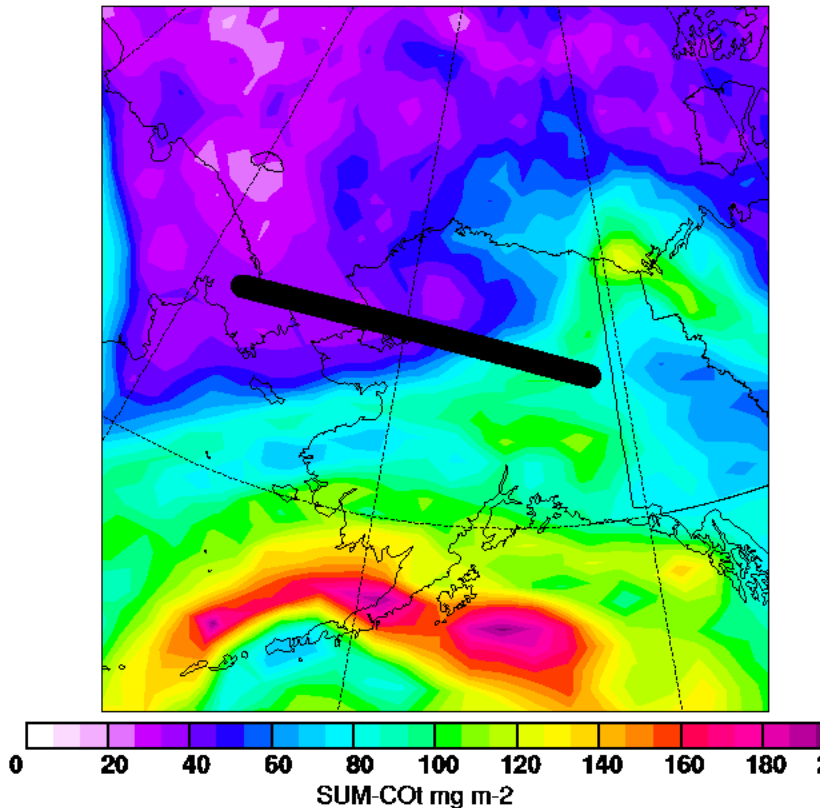
Total CO, Mon.

Total column of species SUM-CO for age class 0 - 20.00 DAYS

Latest analysis time 20080413. 60000 Actual time 20080414.200000

Mean value 0.858E+02 Maximum value 0.609E+03 Minimum value 0.1

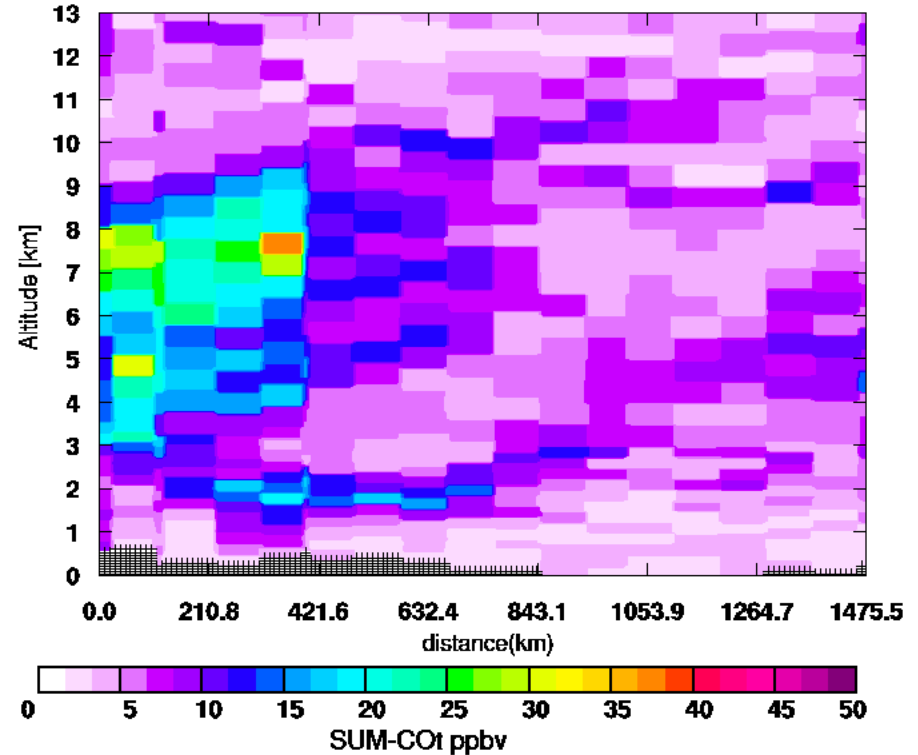
Distance of grid lines 20.0 deg



CROSS SECTION FROM 65 TO 67 LATITUDE AND -143 TO -176 LONGITUDE

NA-CO1 MIXING RATIO FOR AGE CLASS 0 - 20.00 DAYS

LATEST ANALYSIS 20080413 60000 UTC ACTUAL TIME 20080414 20



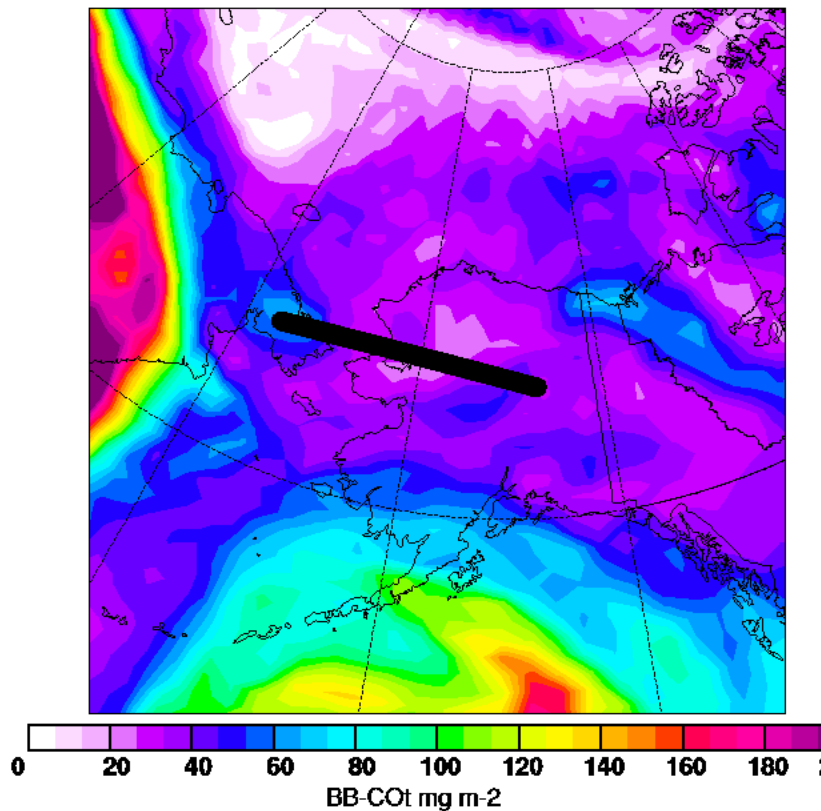
Biomass Burning CO

Total column of species BB-CO_t for age class 0 - 20.00 DAYS

Latest analysis time 20080413. 60000 Actual time 20080414.200000

Mean value 0.560E+02 Maximum value 0.835E+03 Minimum value 0.1

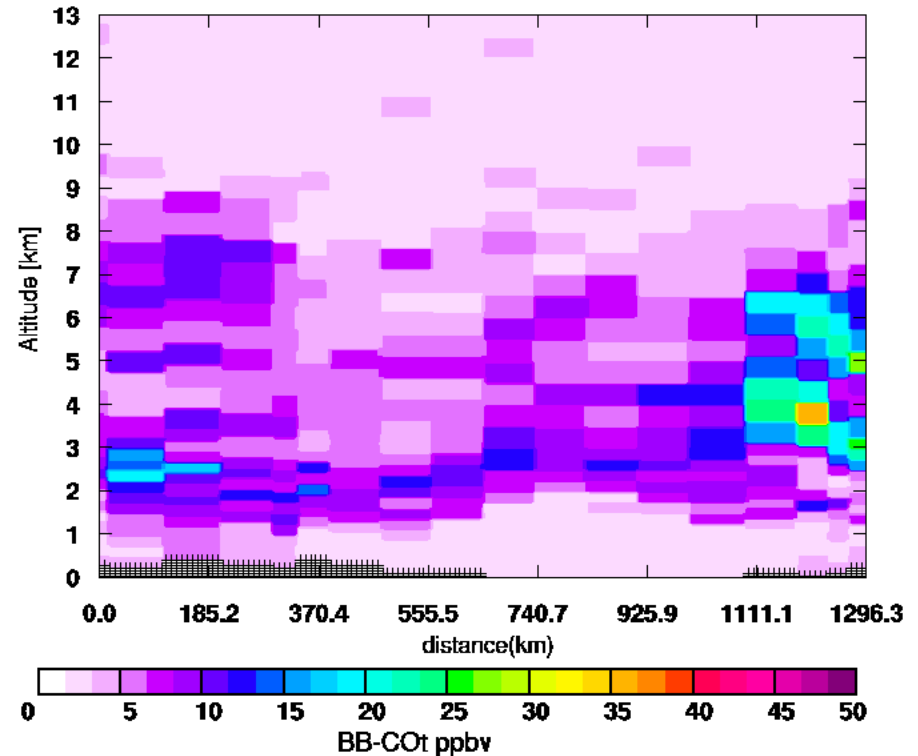
Distance of grid lines 20.0 deg



CROSS SECTION FROM 66 TO 66 LATITUDE AND -147 TO -176 LONGITUDE

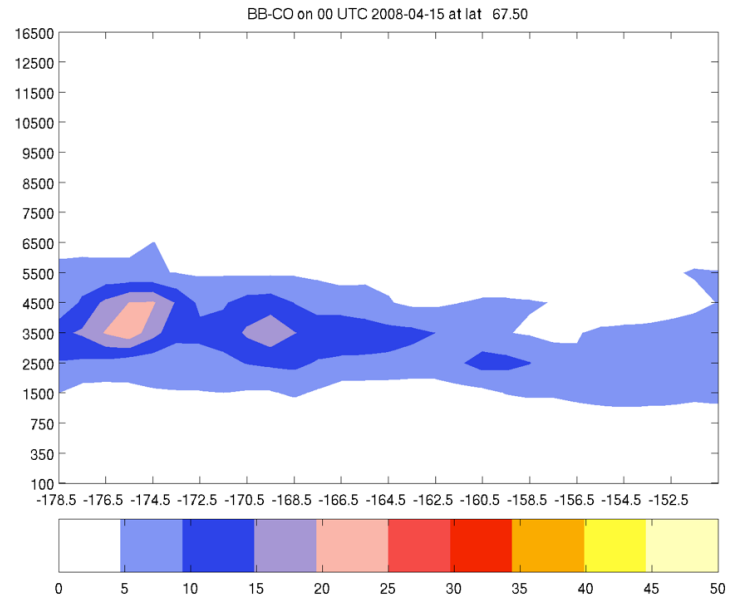
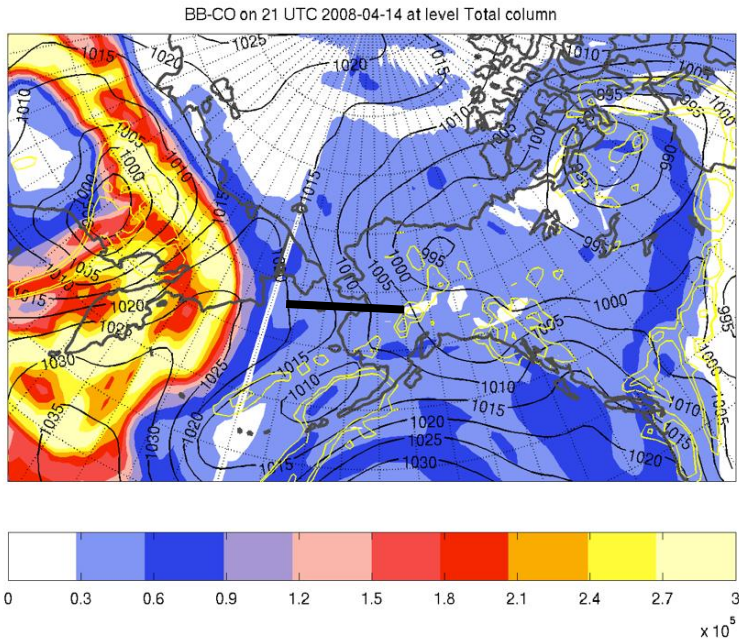
BB-CO_t MIXING RATIO FOR AGE CLASS 0 - 20.00 DAYS

LATEST ANALYSIS 20080413 60000 UTC ACTUAL TIME 20080414 20



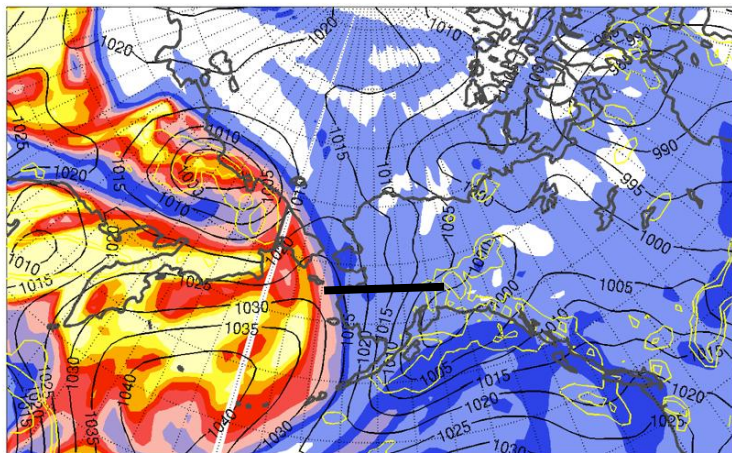
21Z 14 Apr, Biomass CO

67N cross-section



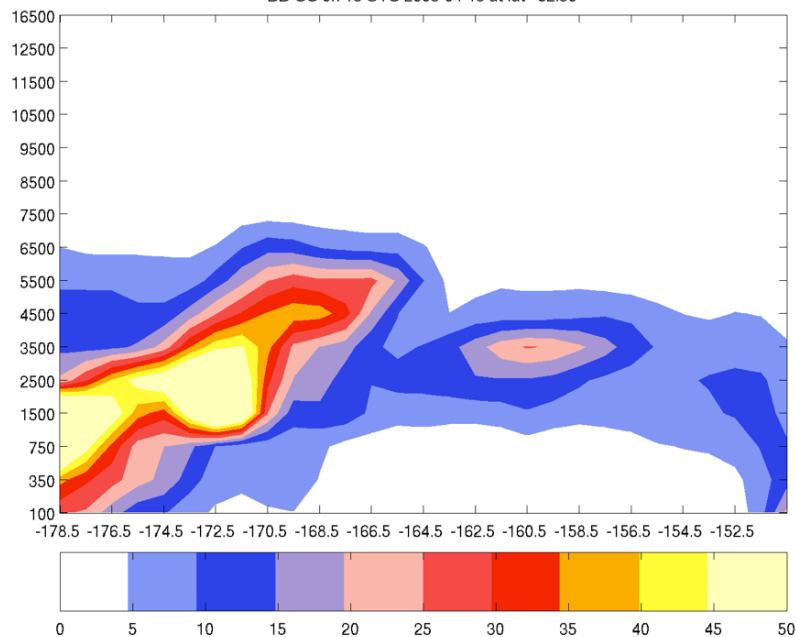
18Z 15 Apr, Biomass CO

BB-CO on 18 UTC 2008-04-15 at level Total column



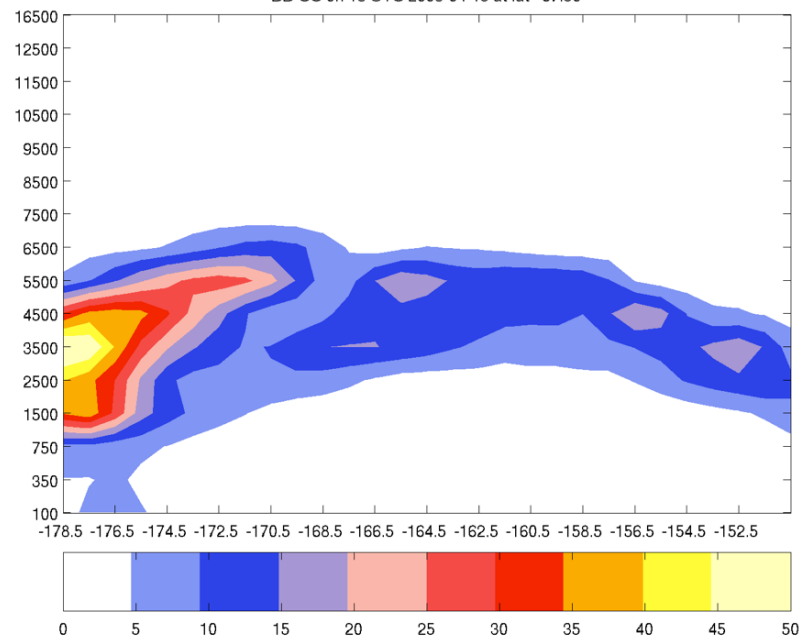
62N cross-section

BB-CO on 18 UTC 2008-04-15 at lat 62.50

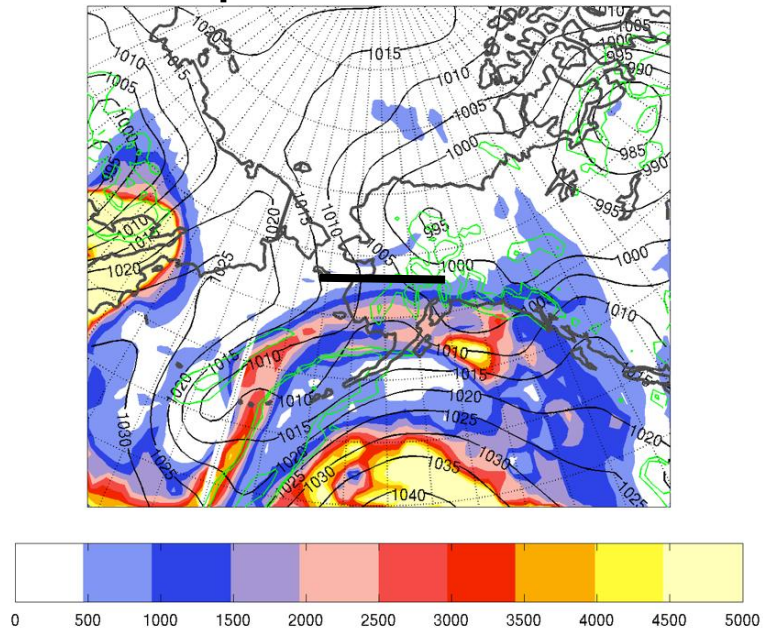


67N cross-section

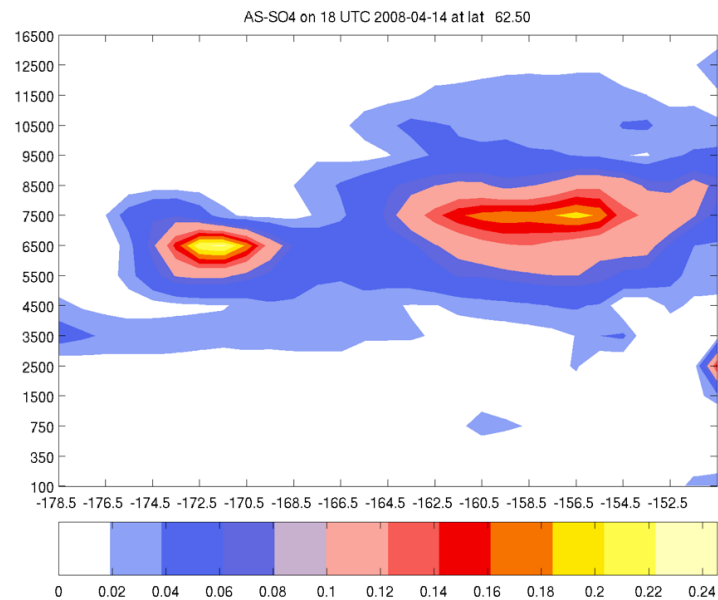
BB-CO on 18 UTC 2008-04-15 at lat 67.50



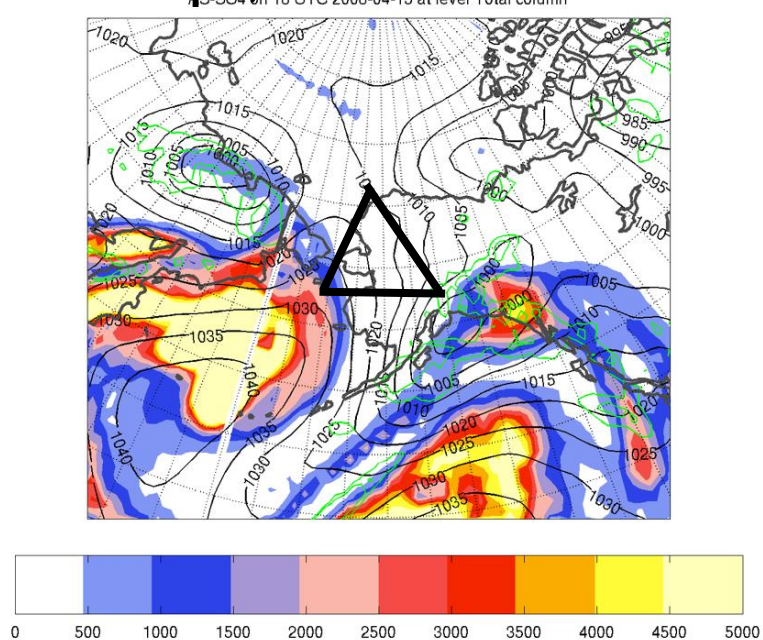
18Z 14 Apr, Asian SO4



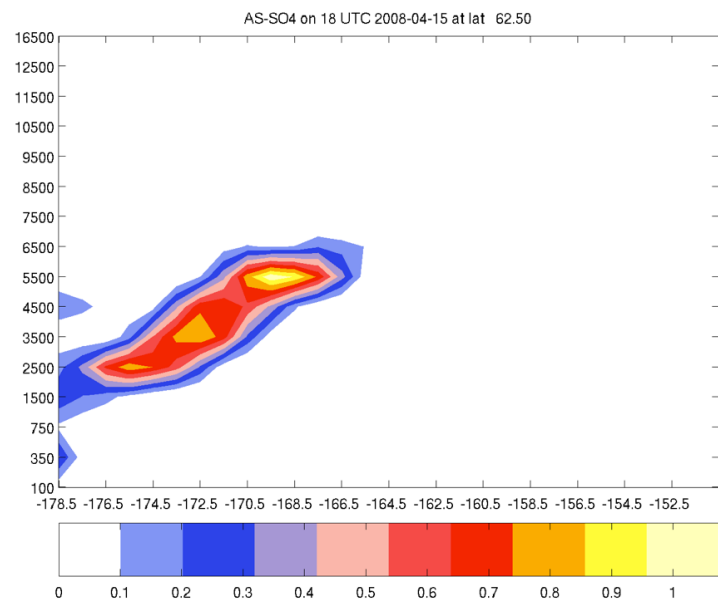
62N cross-section



18Z 15 Apr, Asian SO4

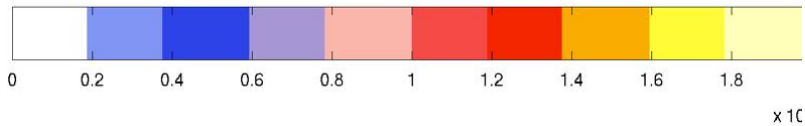
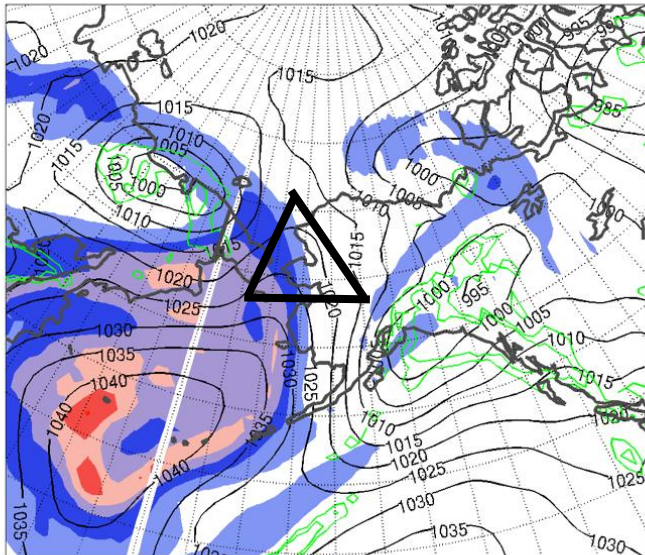


62N cross-section



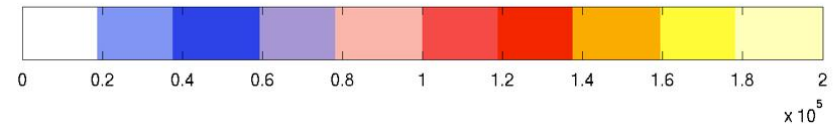
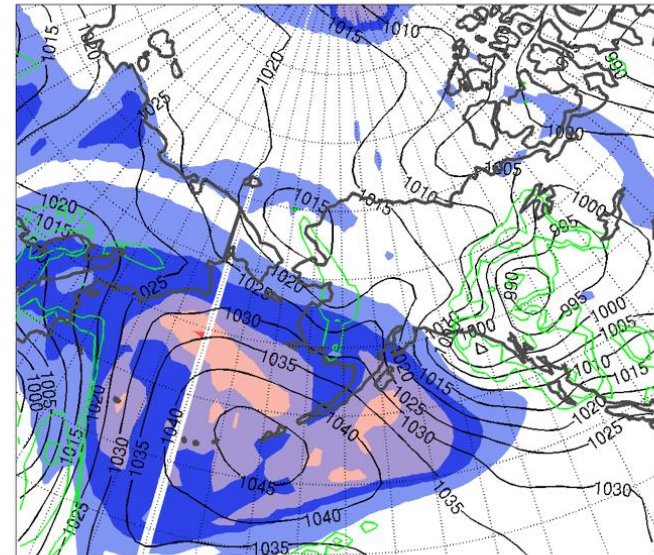
21Z 15 Apr, EU CO

EU-CO on 21 UTC 2008-04-15 at level Total column



18Z 16 Apr, EU CO

EU-CO on 18 UTC 2008-04-16 at level Total column



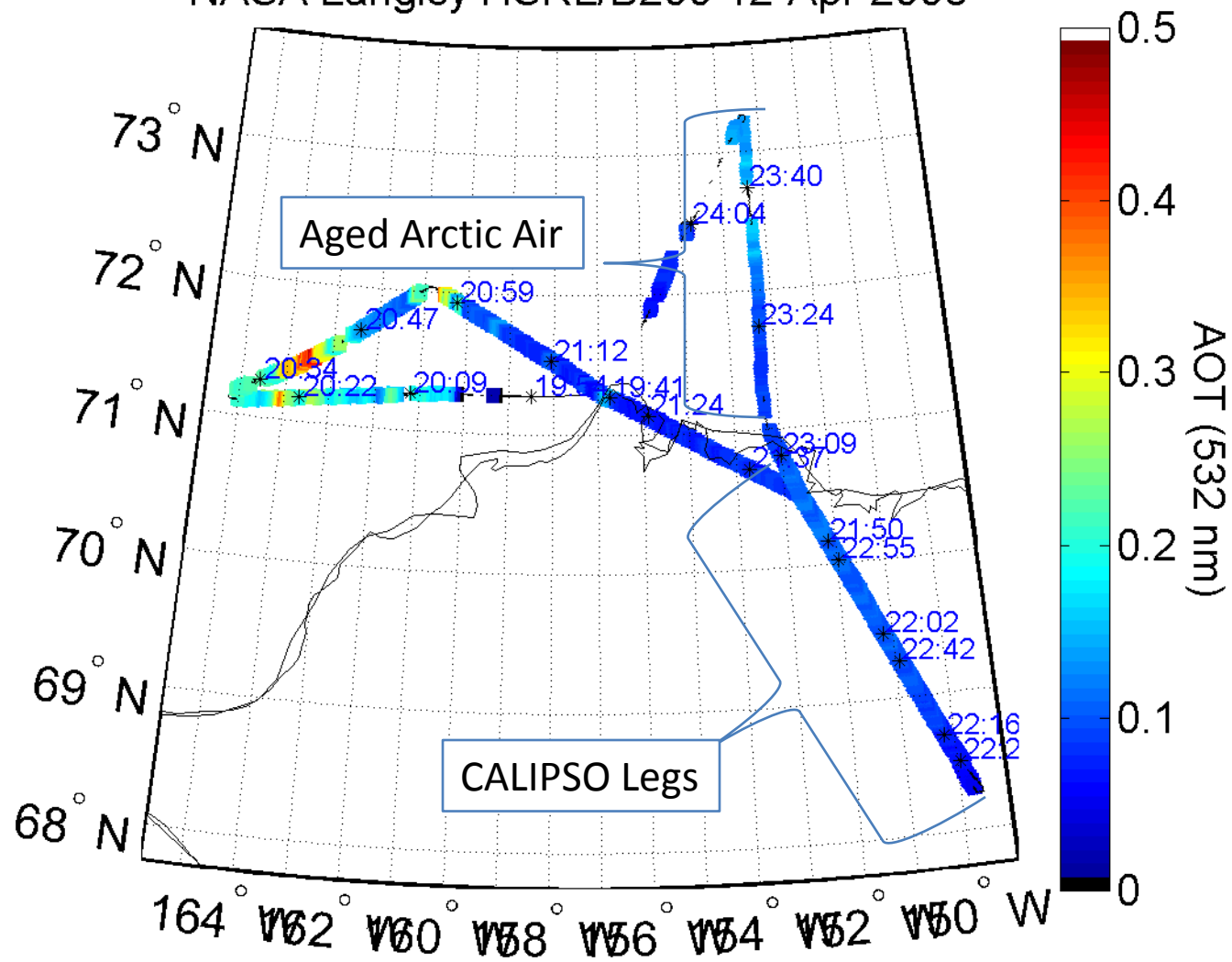
RAQMS Fairbanks Local FX Discussion:

Long-range outlook:

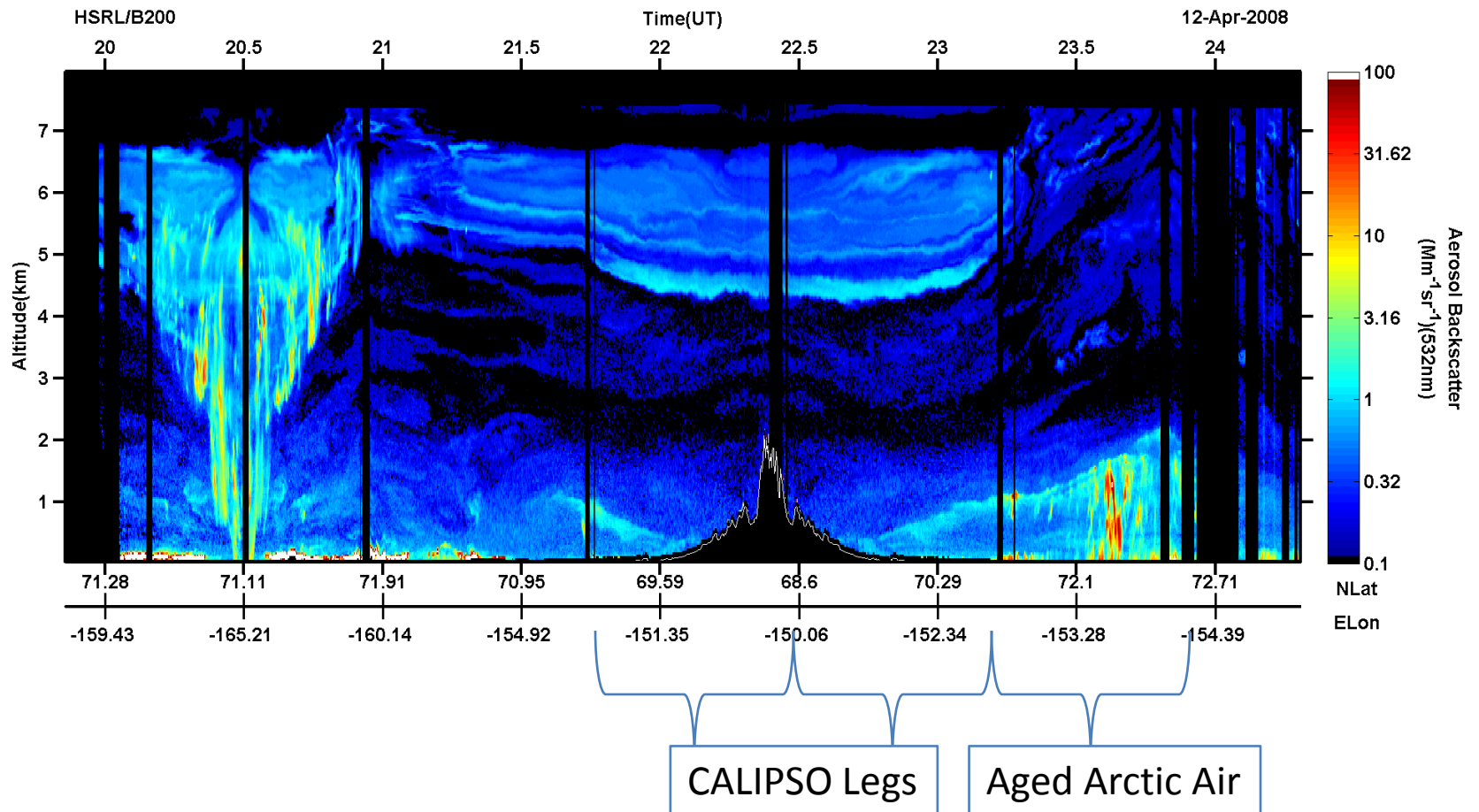
00Z 04/15-04/17

Initialized 12Z 04/12

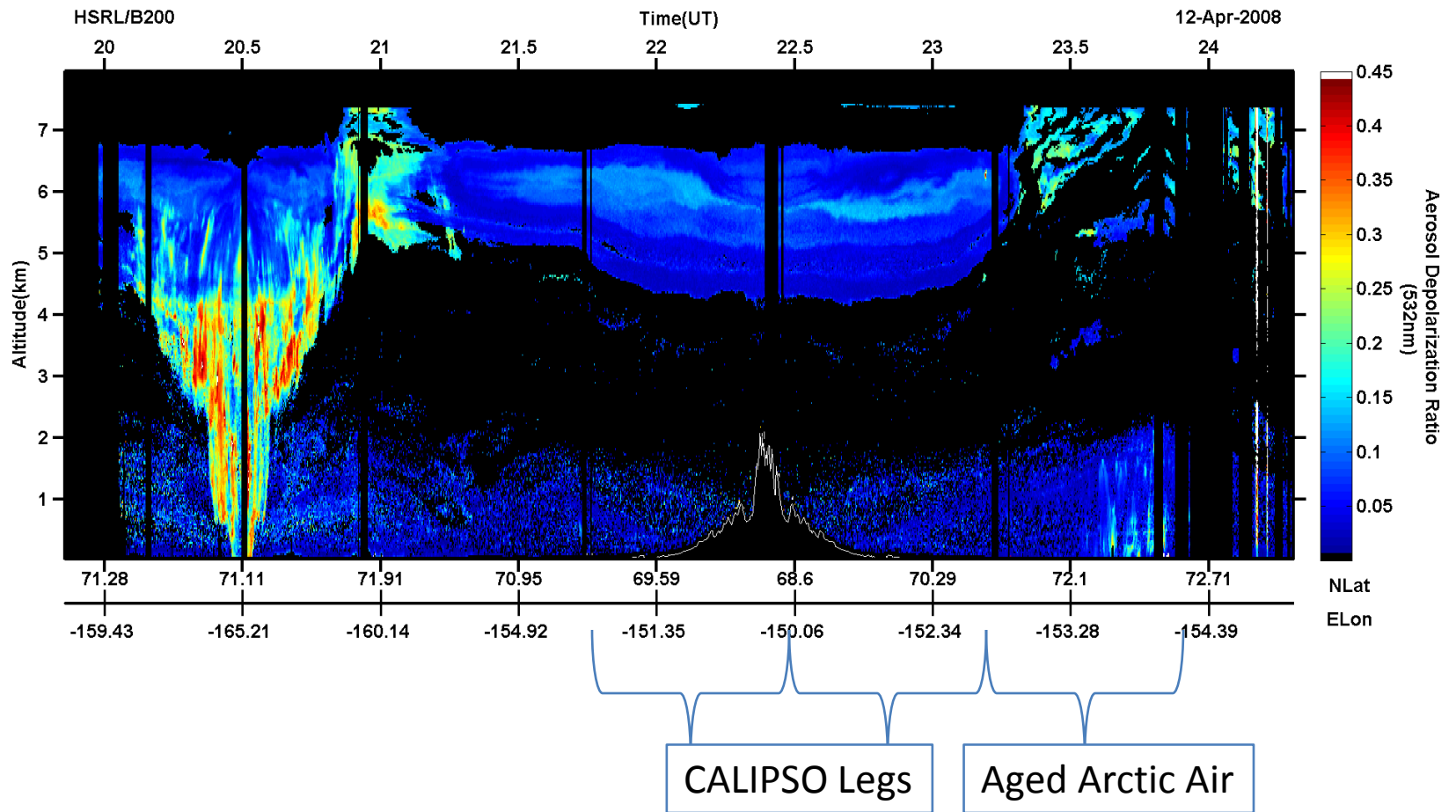
NASA Langley HSRL/B200 12-Apr-2008



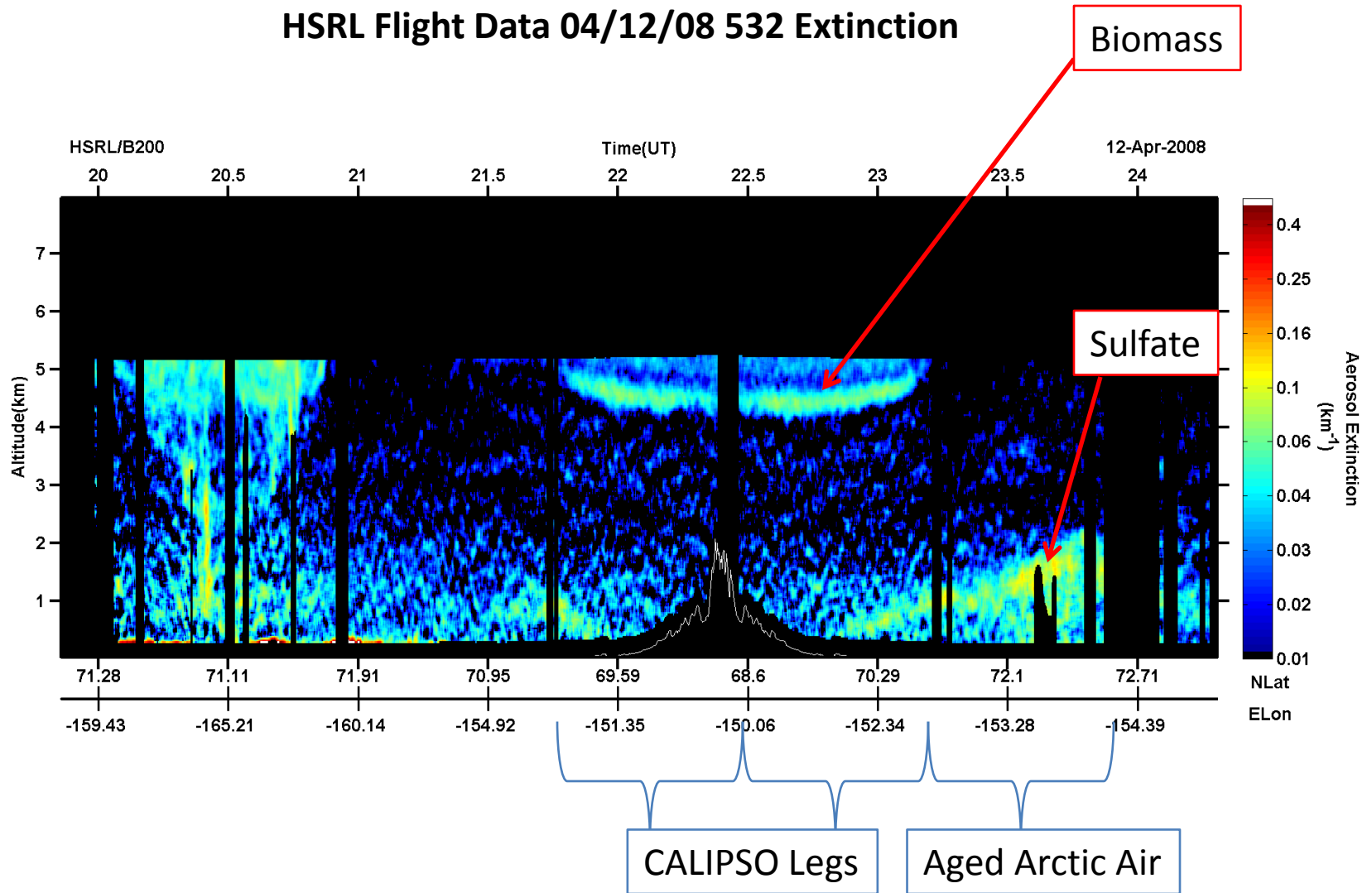
HSRL Flight Data 04/12/08 532 Backscatter

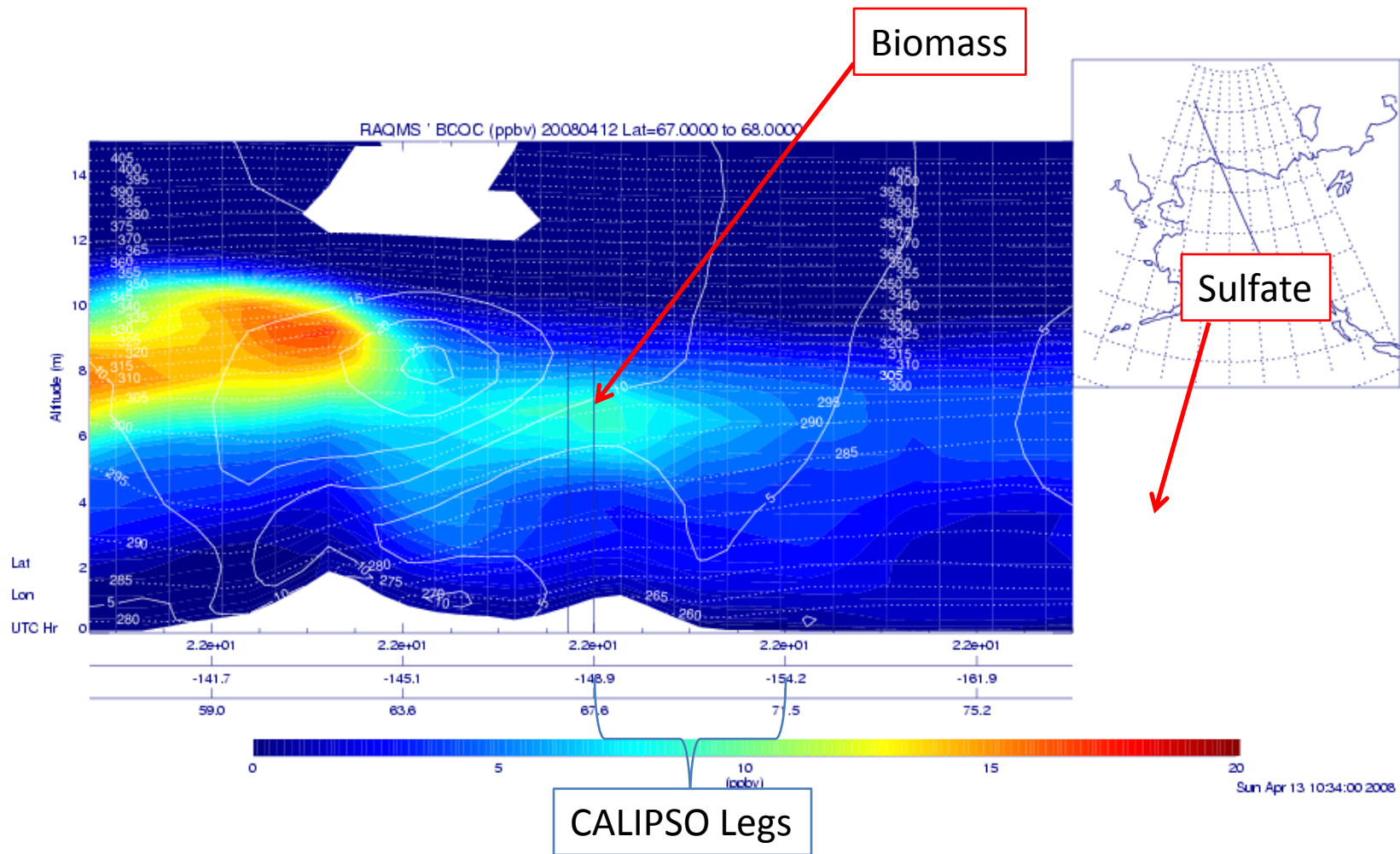


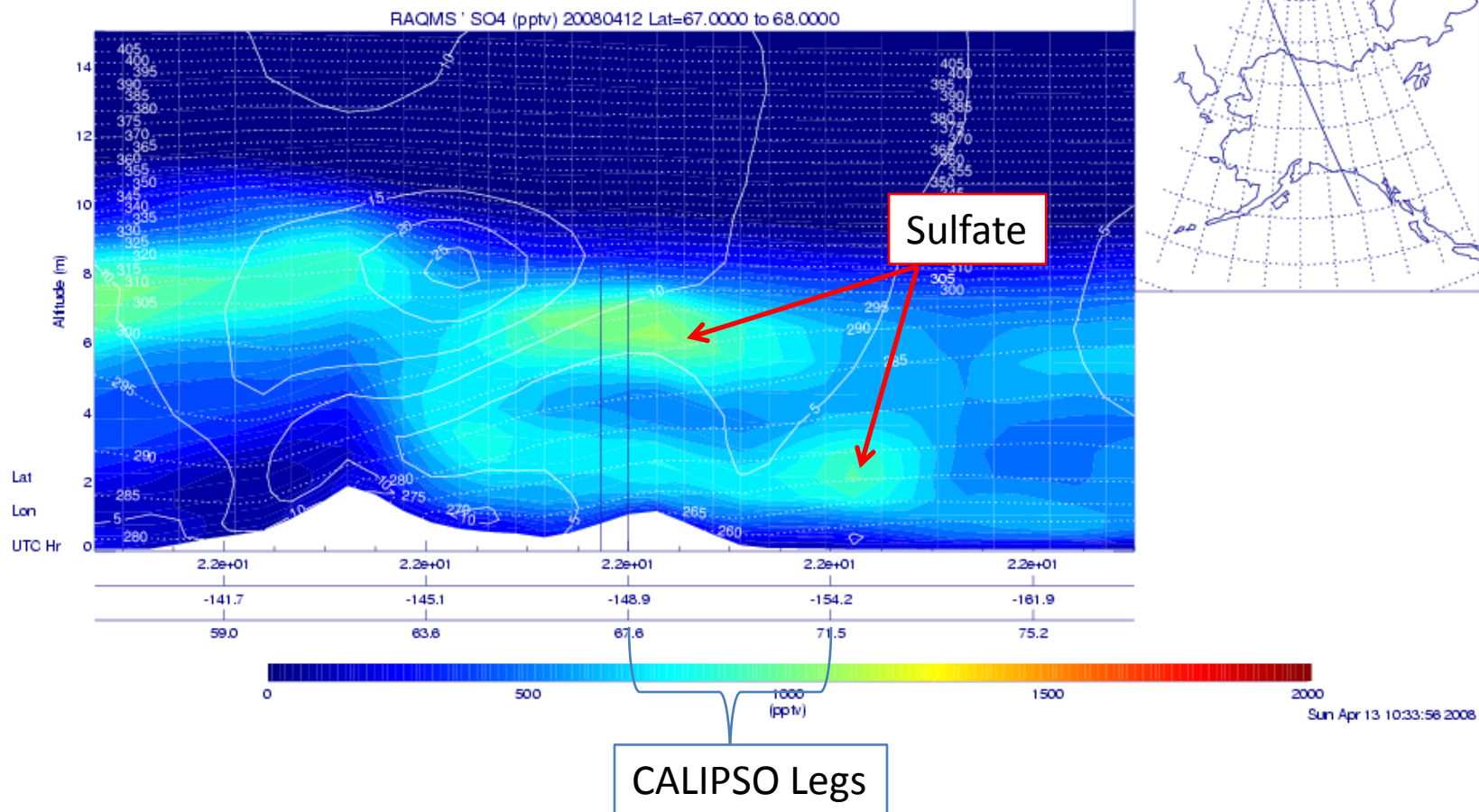
HSRL Flight Data 04/12/08 532 Depolarization



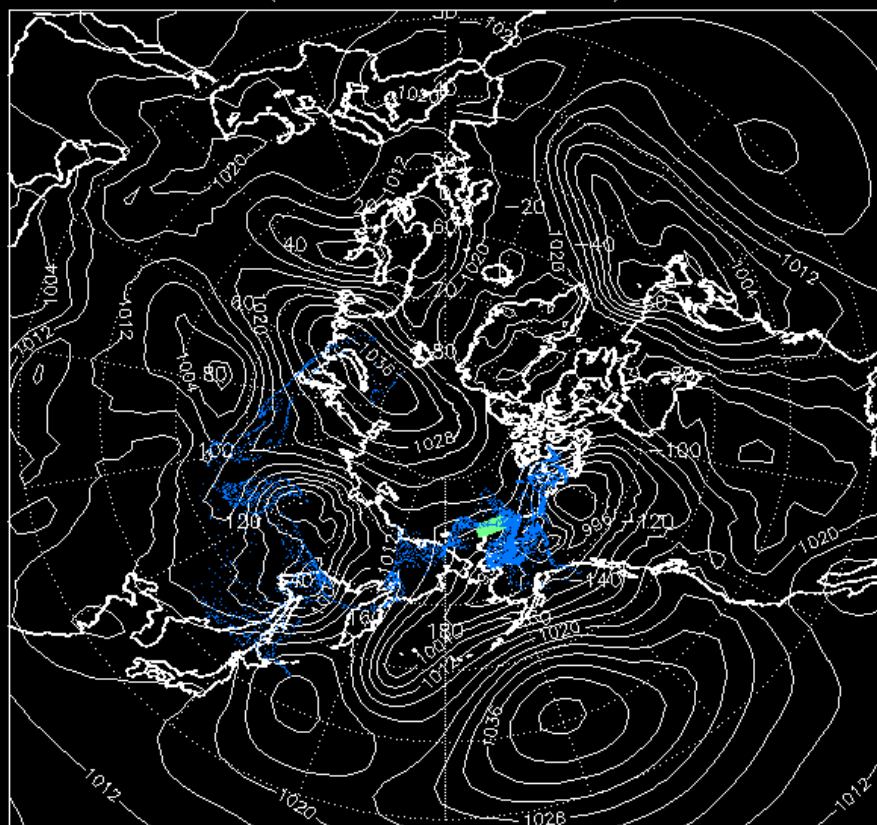
HSRL Flight Data 04/12/08 532 Extinction





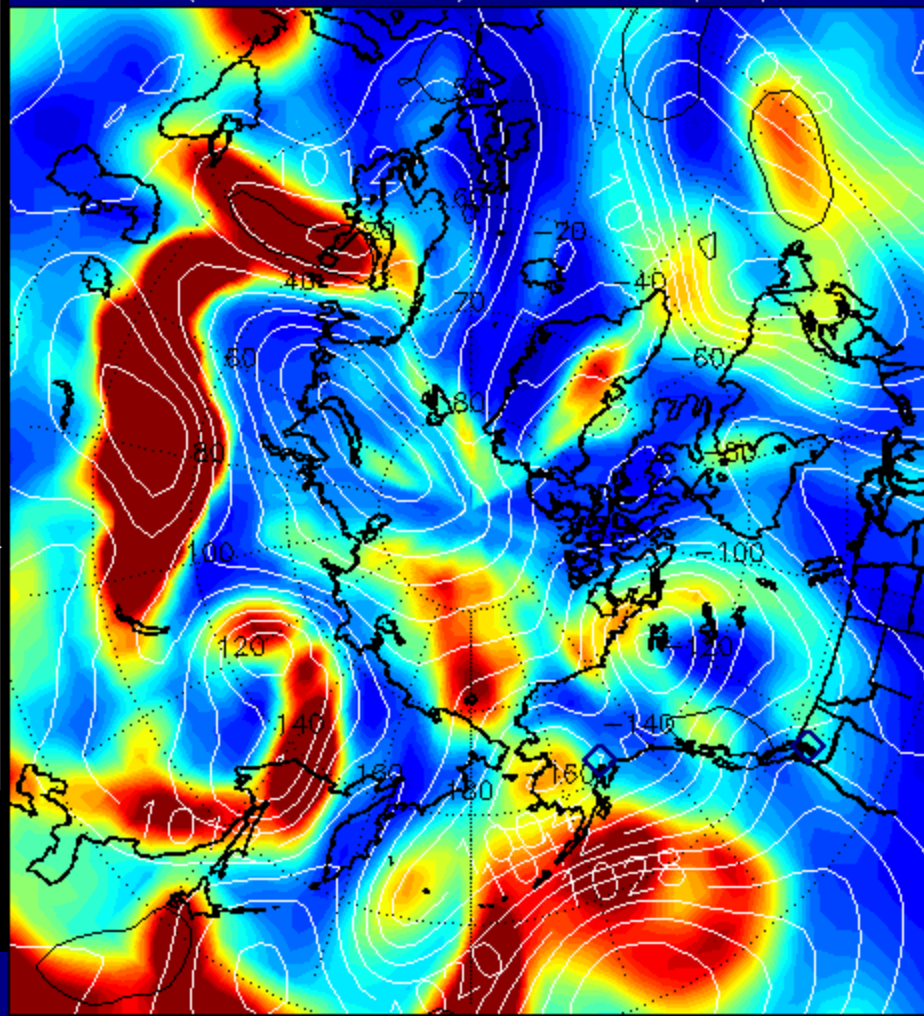


2008041400 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



AOD Total Aerosol 00Z 20080414

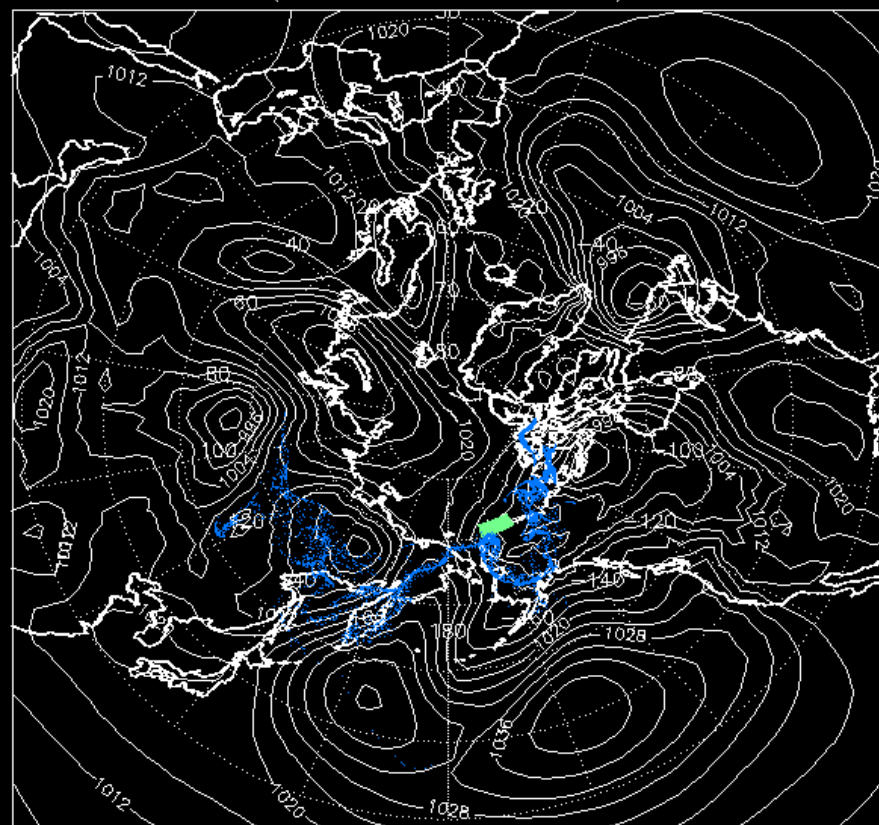
(MSL Pressure Contoured/95% Convective Precip=Red)



0.0 0.2 0.4 0.6 0.8 1.0

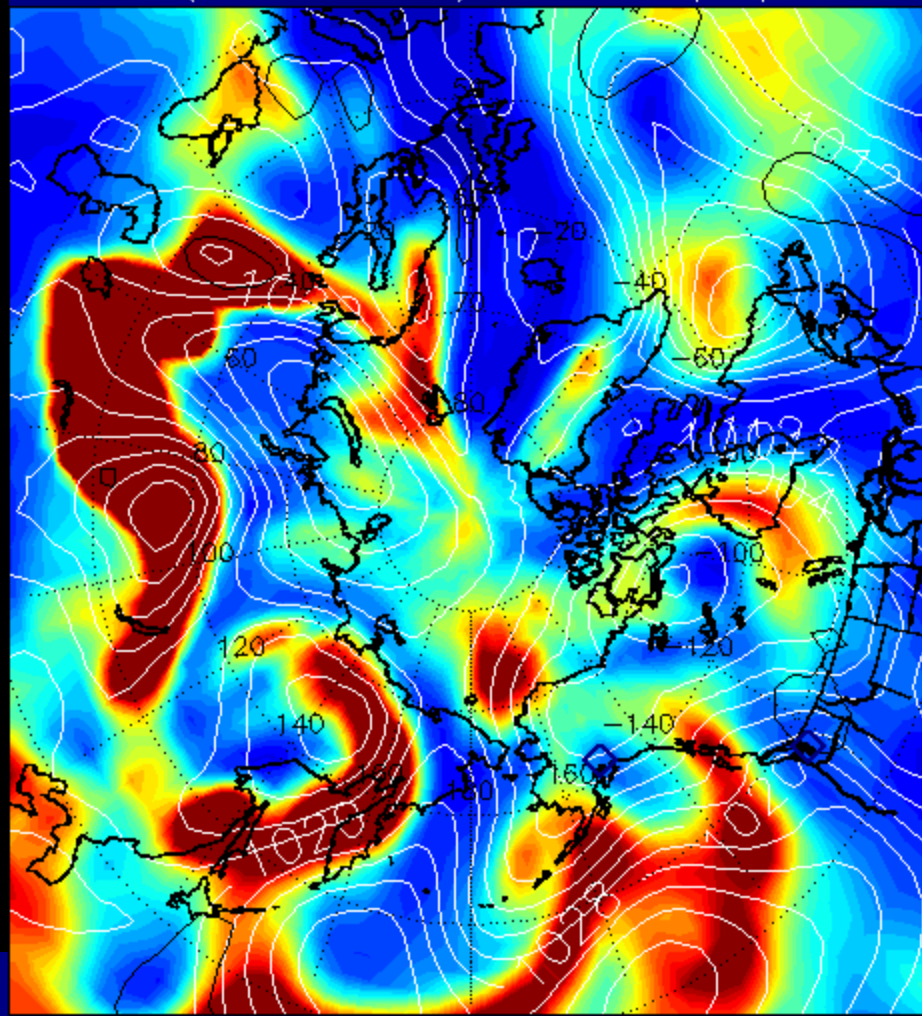
RAQMS₆ 24hr ASSIM + 36hr Fx Initialized 12Z 20080411

2008041500 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



AOD Total Aerosol 00Z 20080415

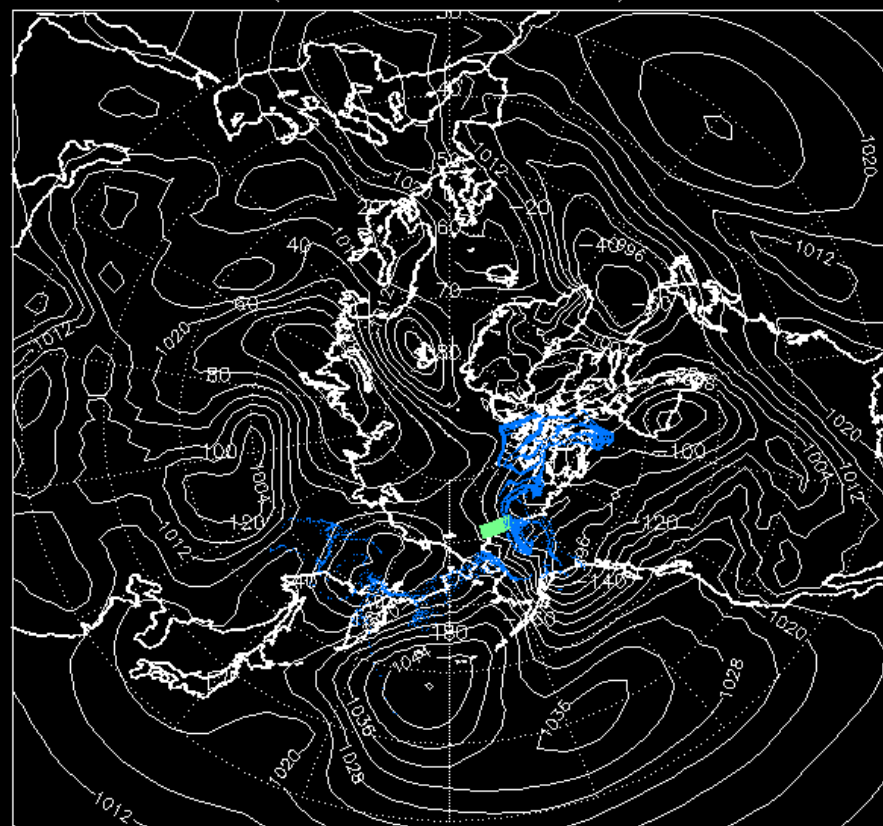
(MSL Pressure Contoured/95% Convective Precip=Red)



0.0 0.2 0.4 0.6 0.8 1.0

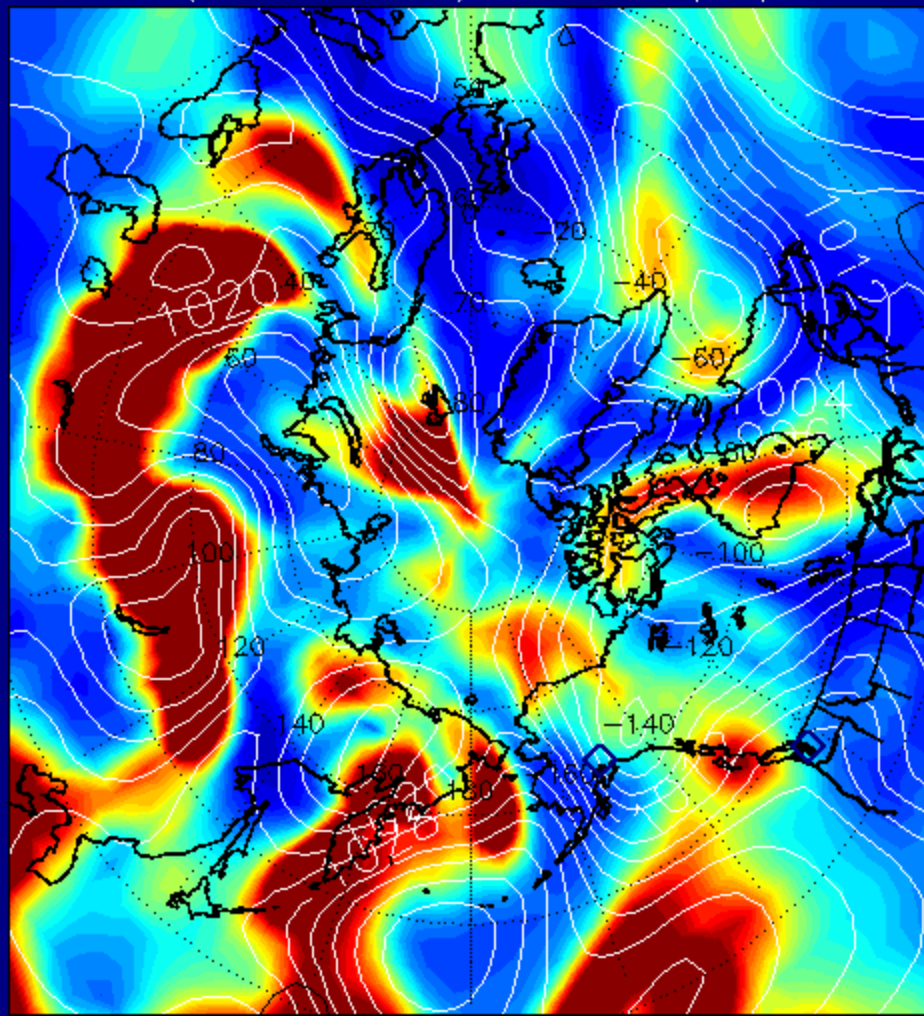
RAQMS₆ 24hr ASSIM + 60hr Fx Initialized 12Z 20080411

2008041600 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



AOD Total Aerosol 00Z 20080416

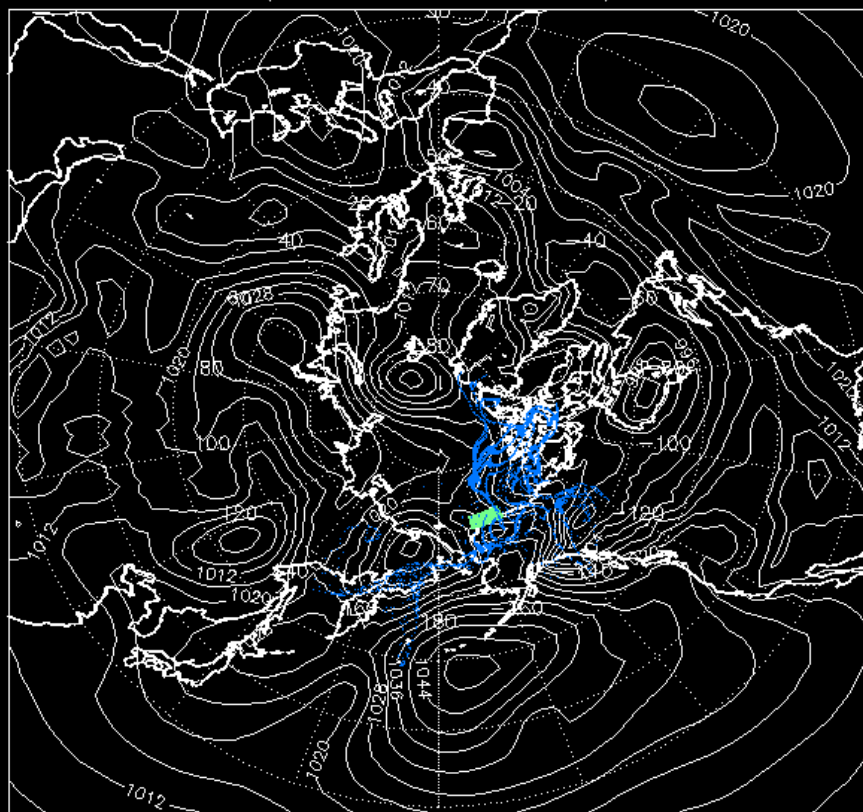
(MSL Pressure Contoured/95% Convective Precip=Red)



0.0 0.2 0.4 0.6 0.8 1.0

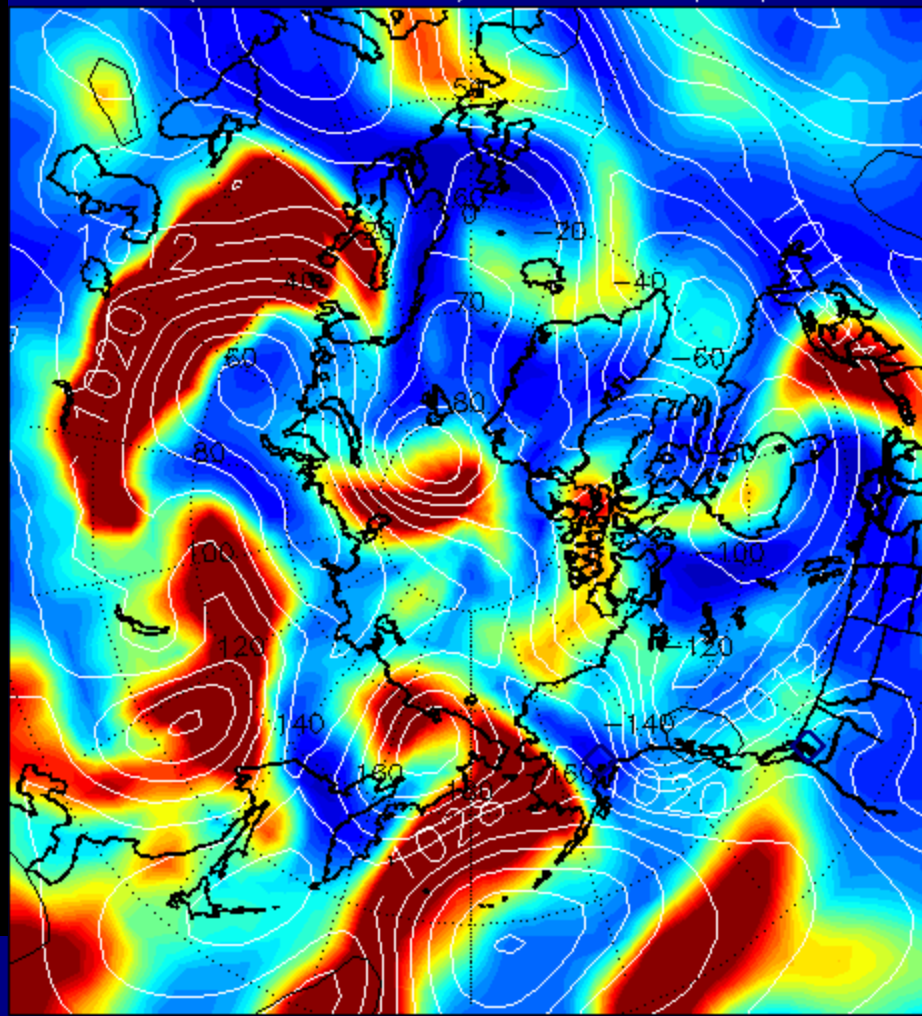
RAQMS₆ 24hr ASSIM + 84hr Fx Initialized 12Z 20080411

2008041700 Initial (Blue) and Final (Green) Lat/Lon
(Barrow Parcels below 5km)



AOD Total Aerosol 00Z 20080417

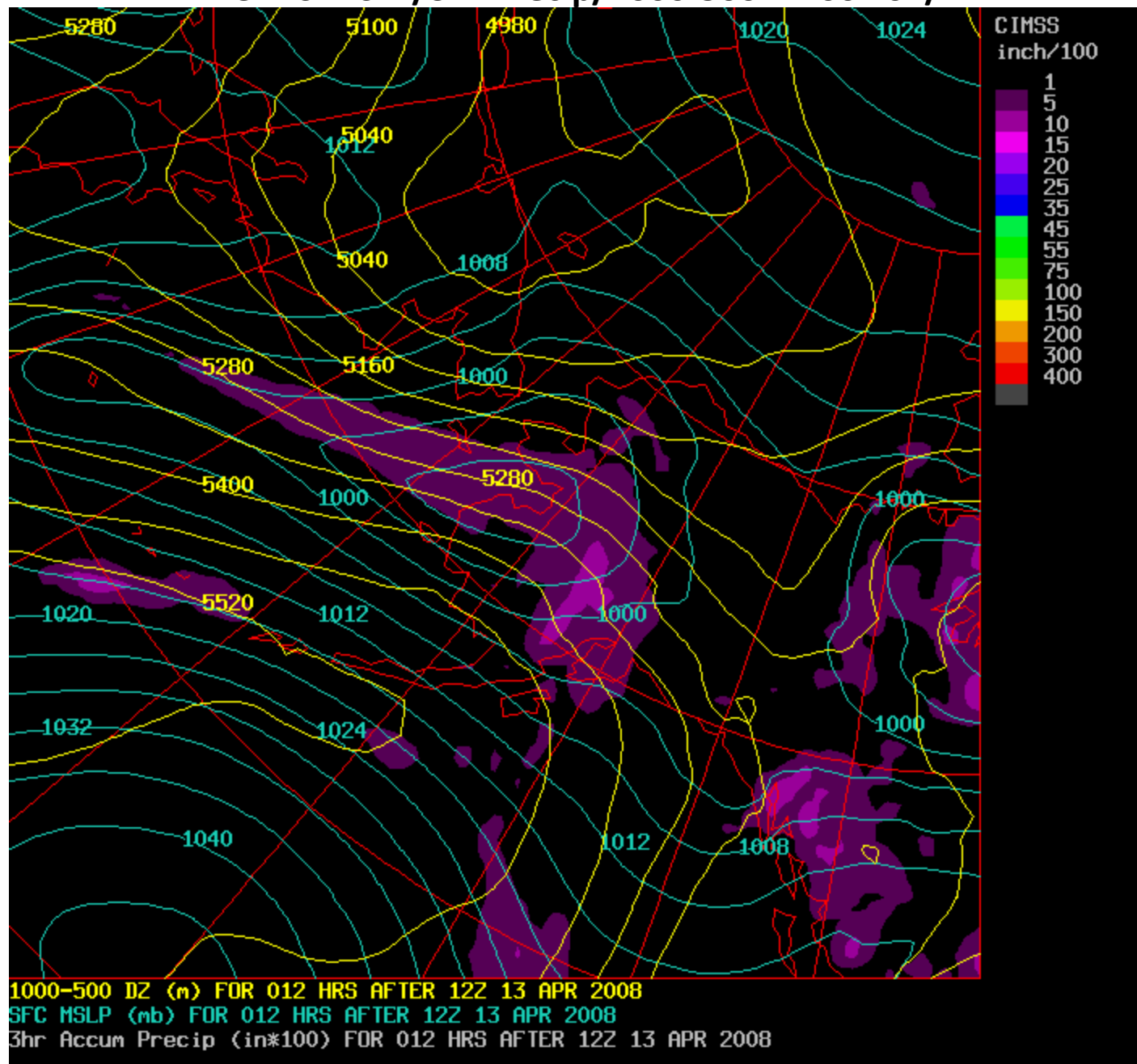
(MSL Pressure Contoured/95% Convective Precip=Red)



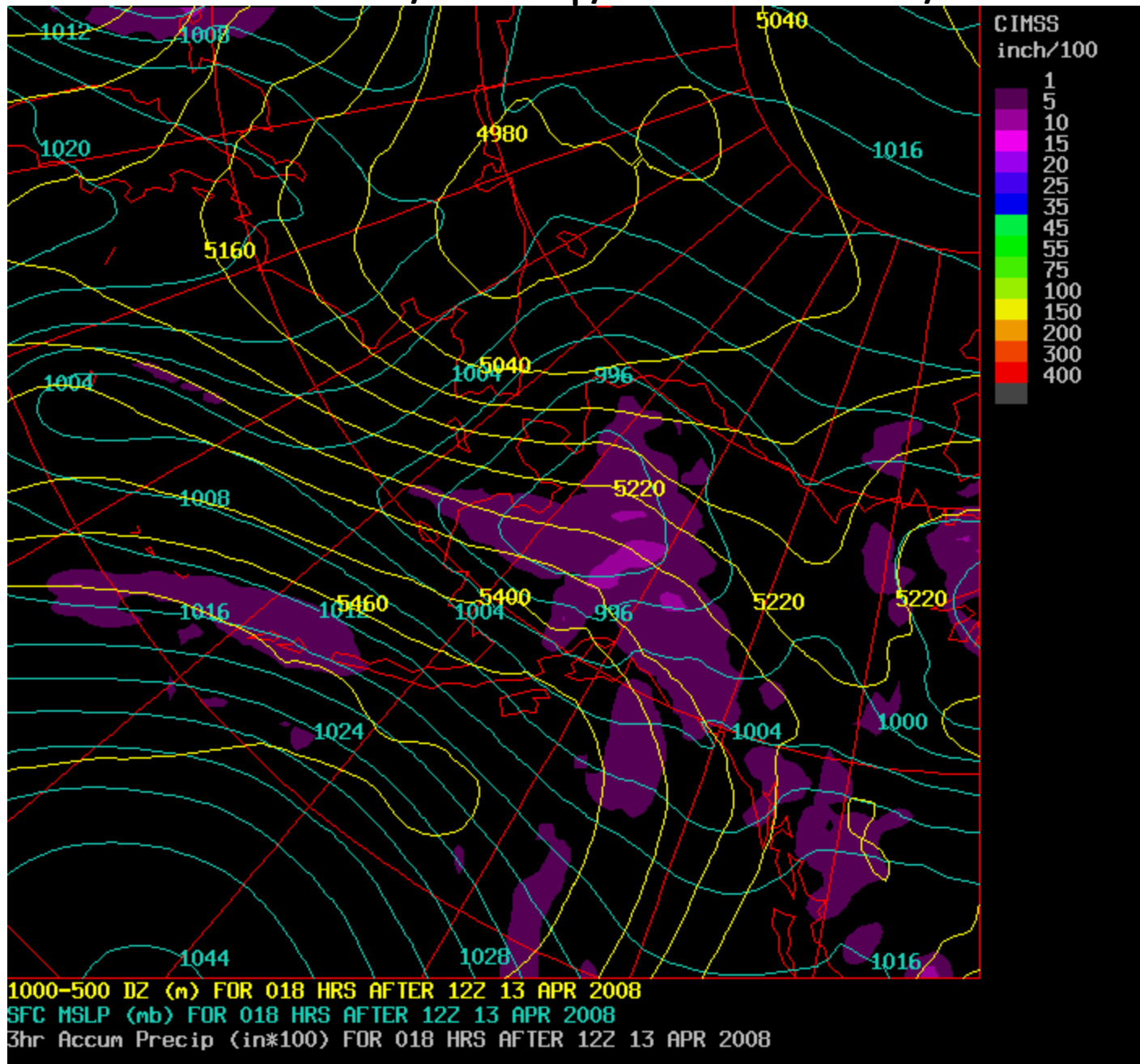
0.0 0.2 0.4 0.6 0.8 1.0

RAQMS₆ 24hr ASSIM + 108hr Fx Initialized 12Z 20080411

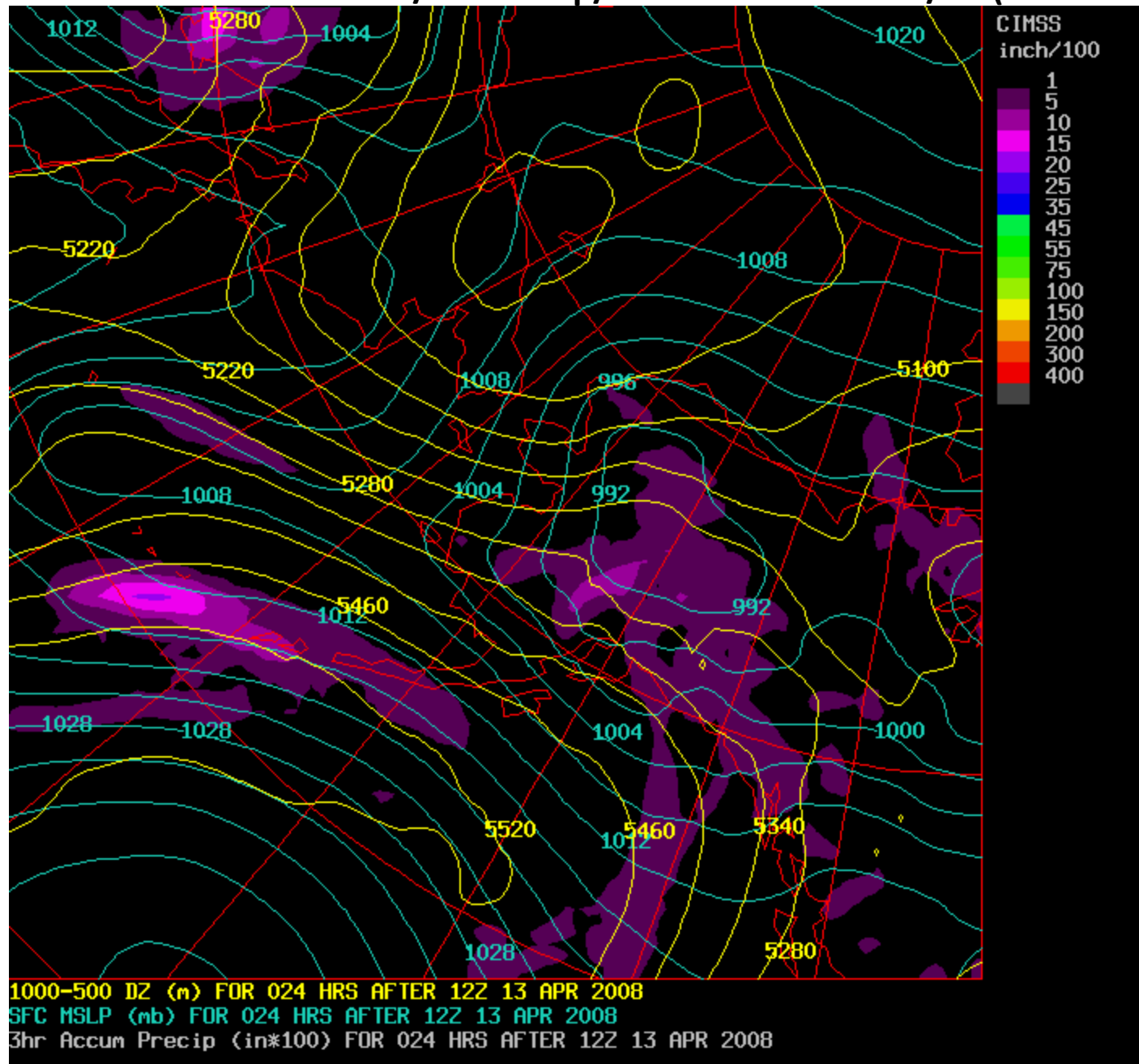
CRAS MSLP/3hr Precip/1000-500 DZ 00Z 04/14



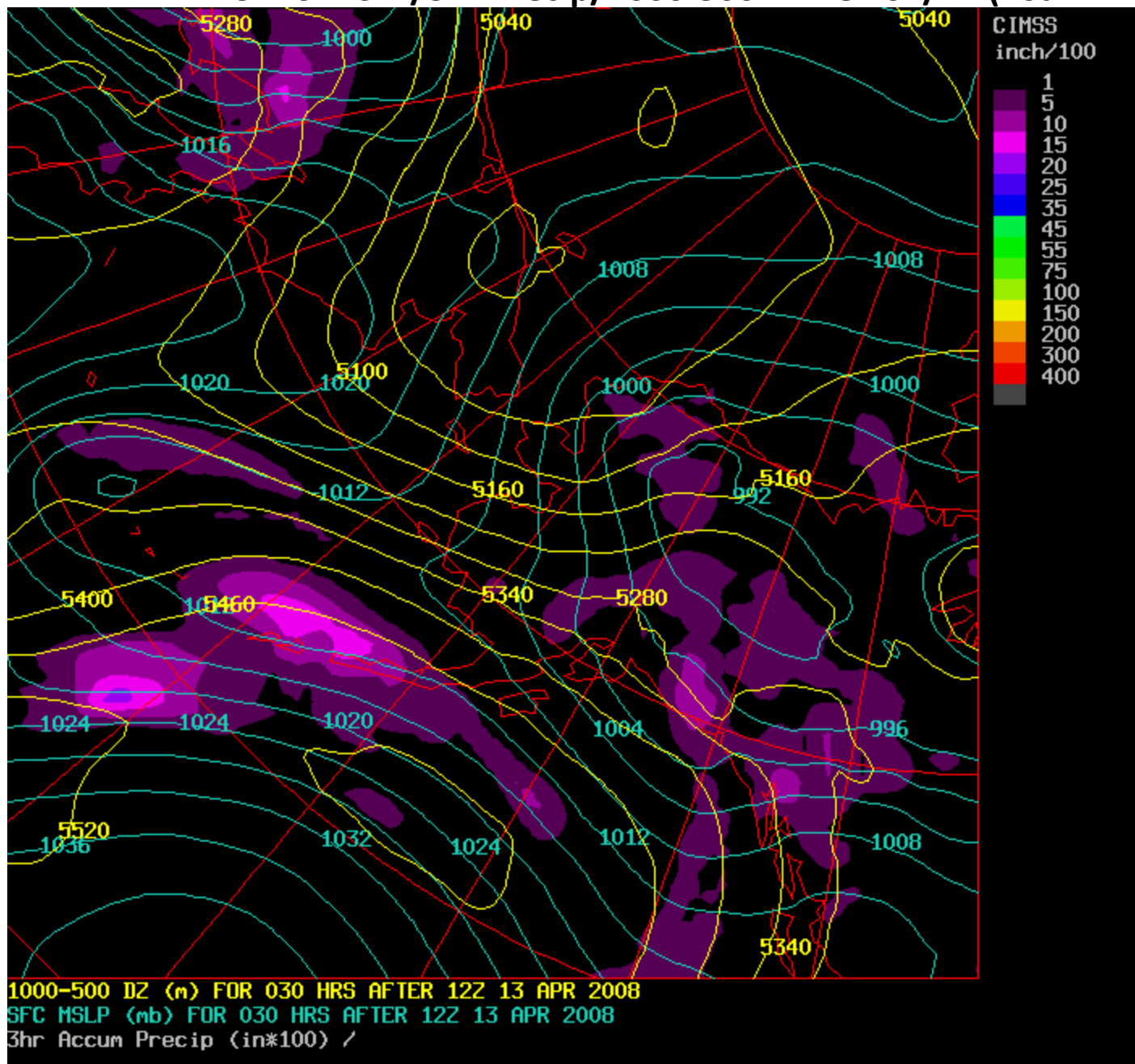
CRAS MSLP/3hr Precip/1000-500 DZ 06Z 04/14



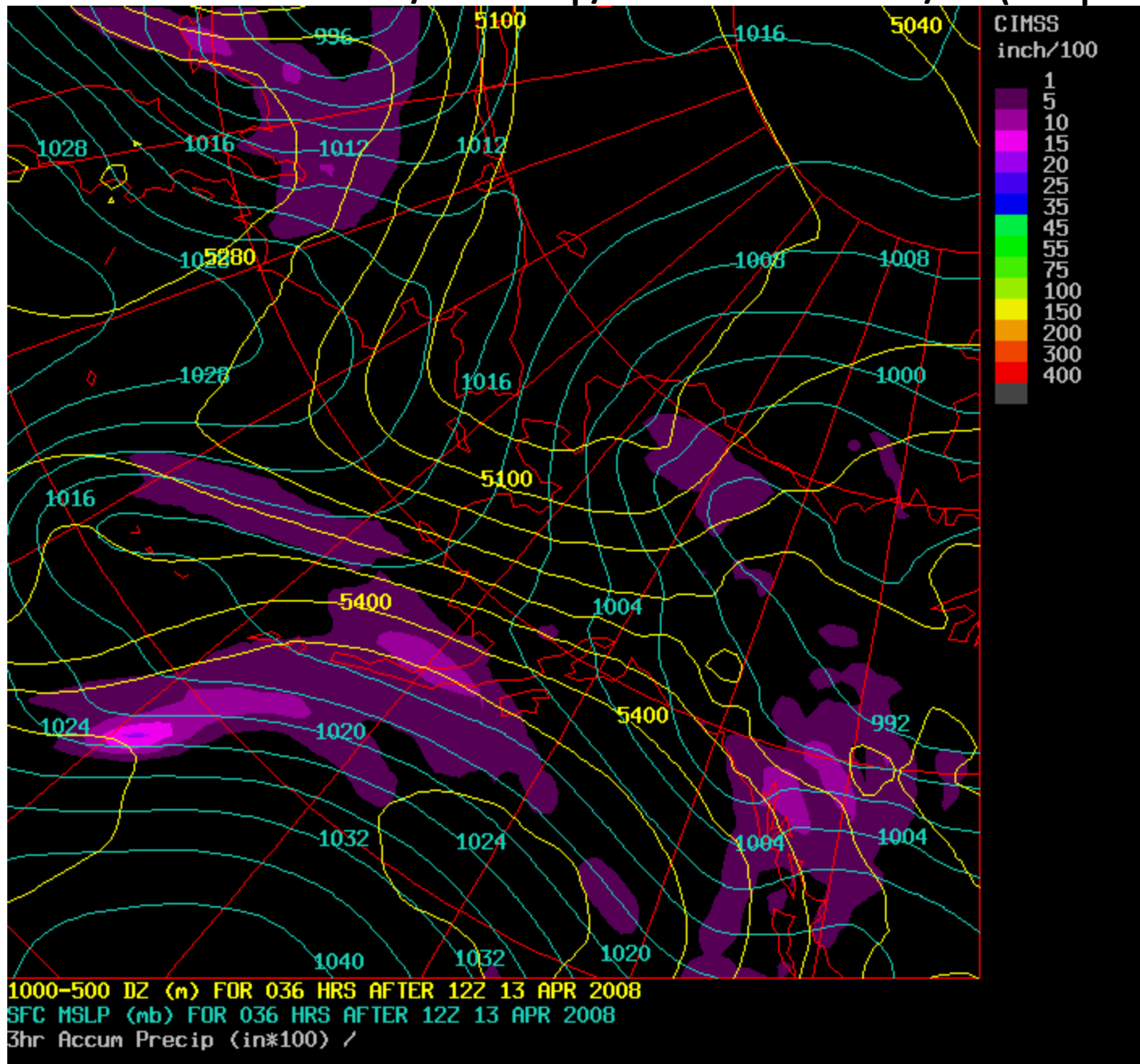
CRAS MSLP/3hr Precip/1000-500 DZ 12Z 04/14 (4am LT Mon)



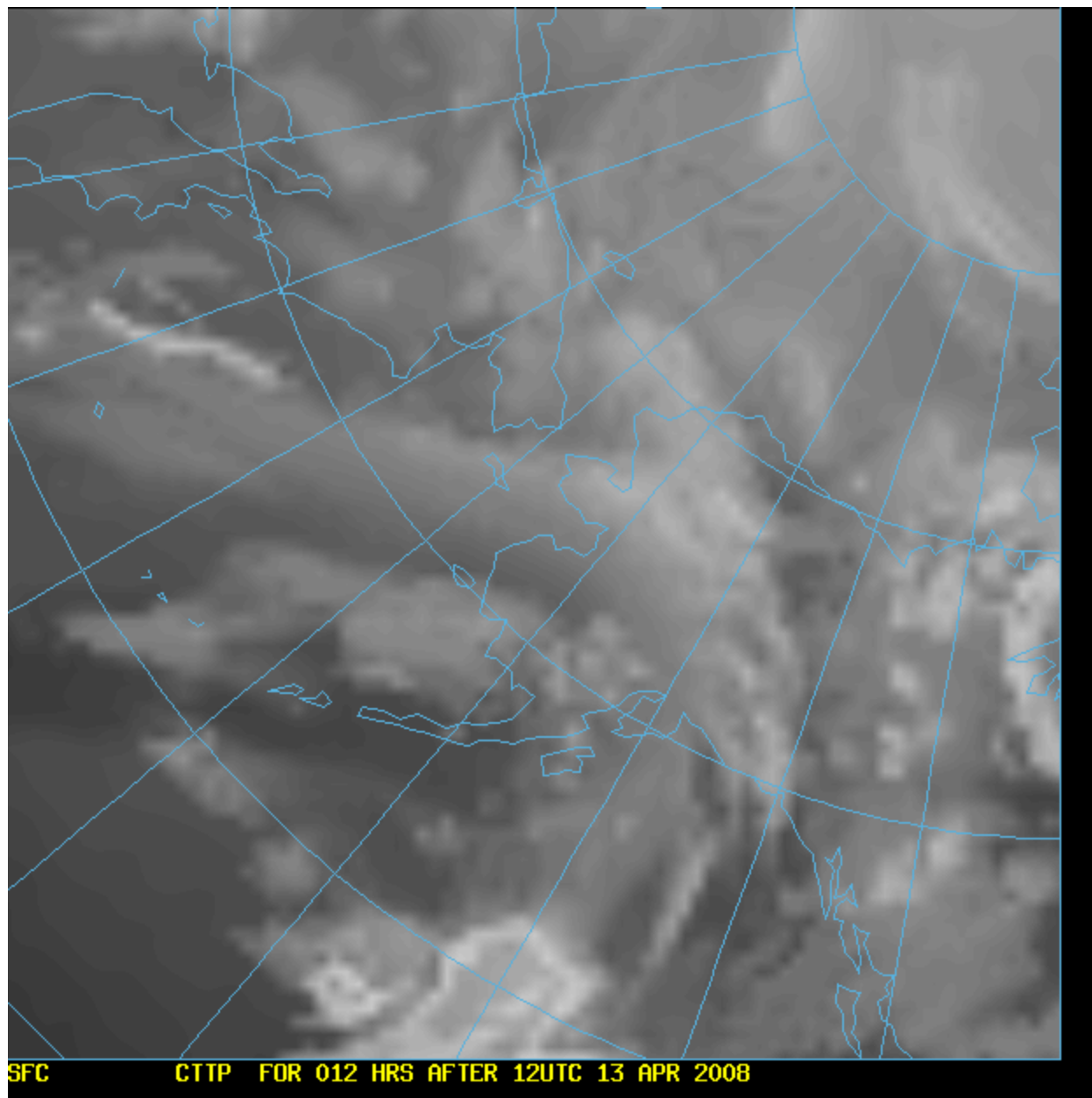
CRAS MSLP/3hr Precip/1000-500 DZ 18Z 04/14 (10am LT Mon)



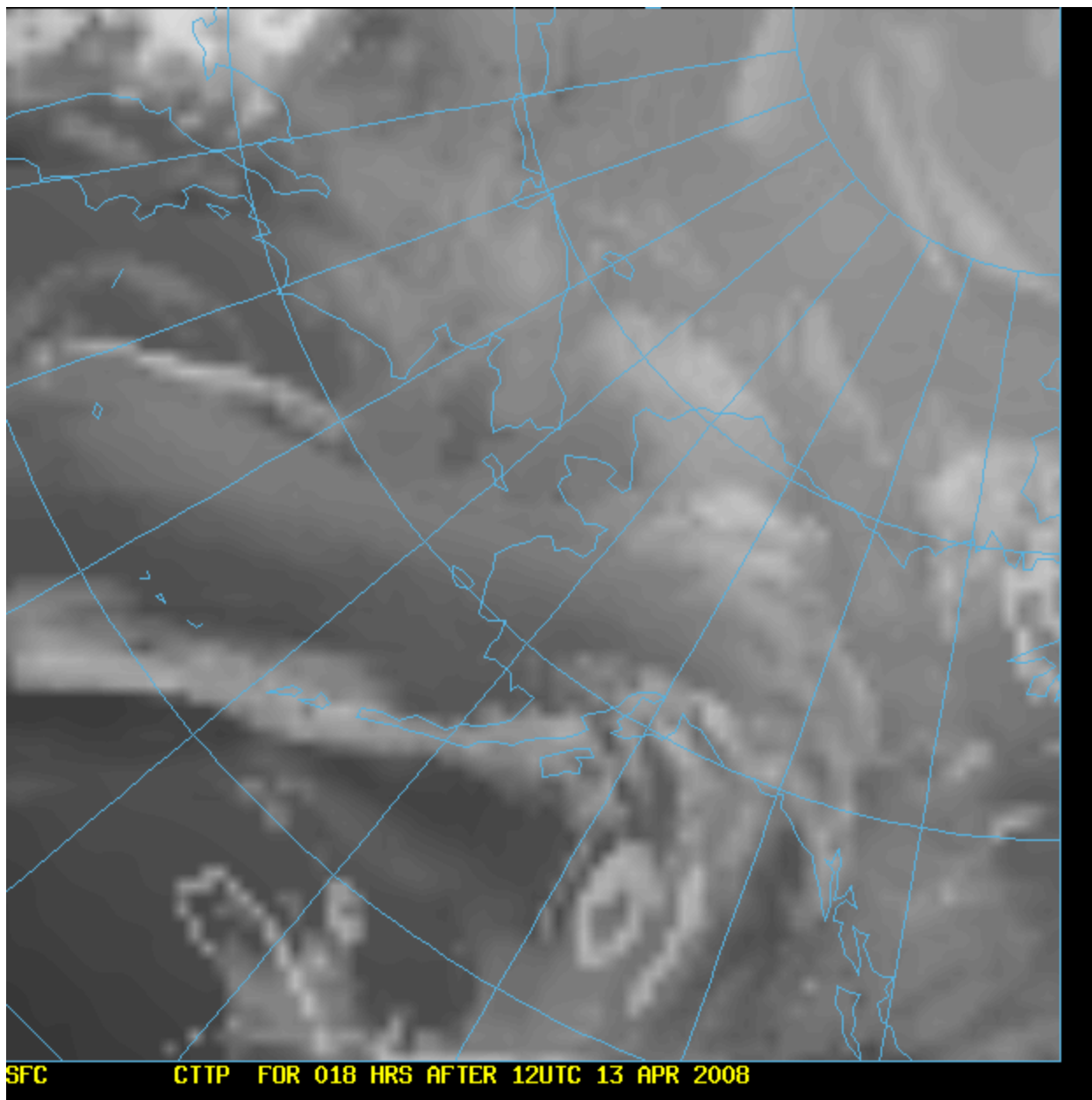
CRAS MSLP/3hr Precip/1000-500 DZ 00Z 04/15 (4:00pm LT Mon)



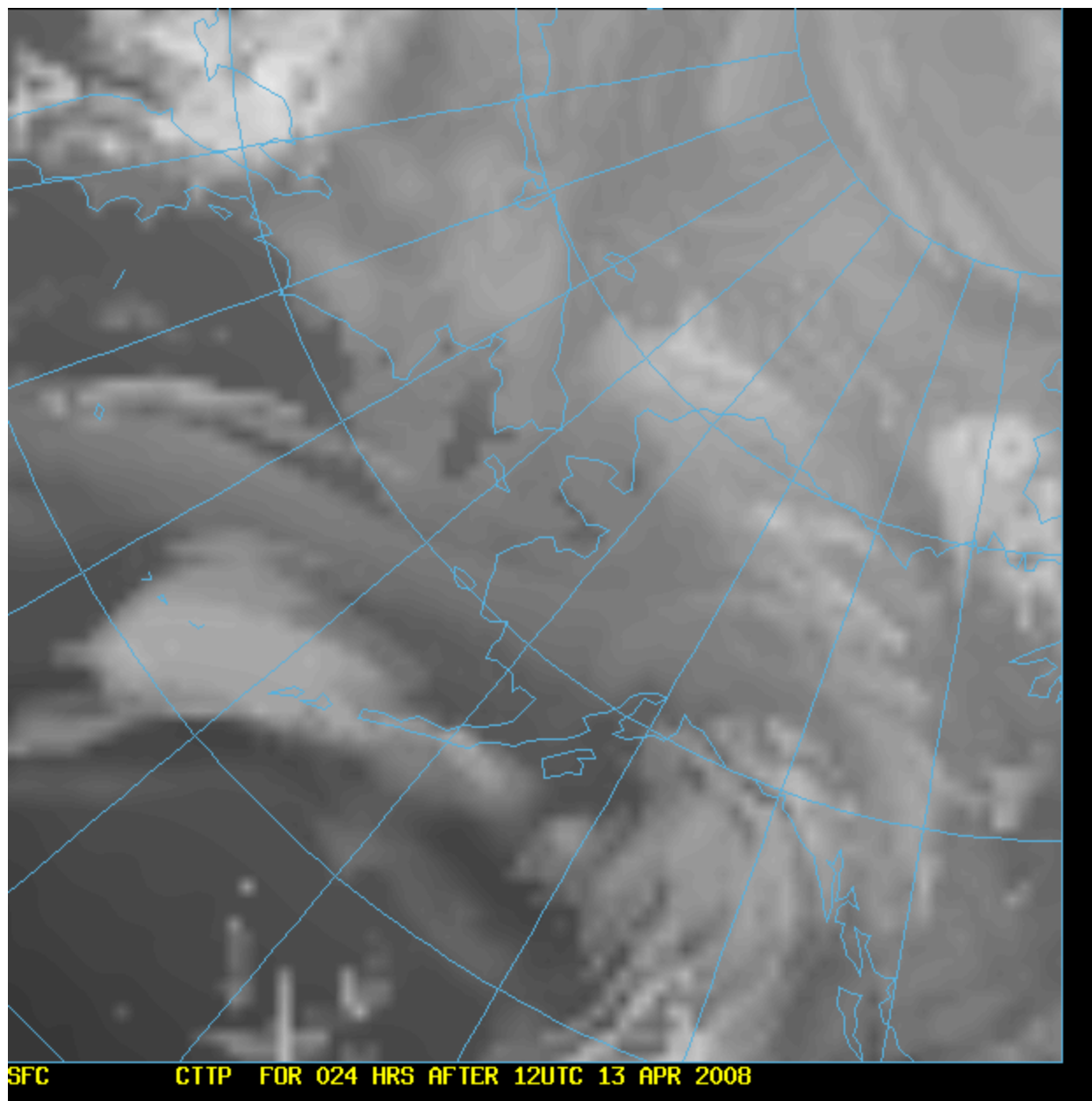
CRAS Synthetic Vis 00Z 04/14



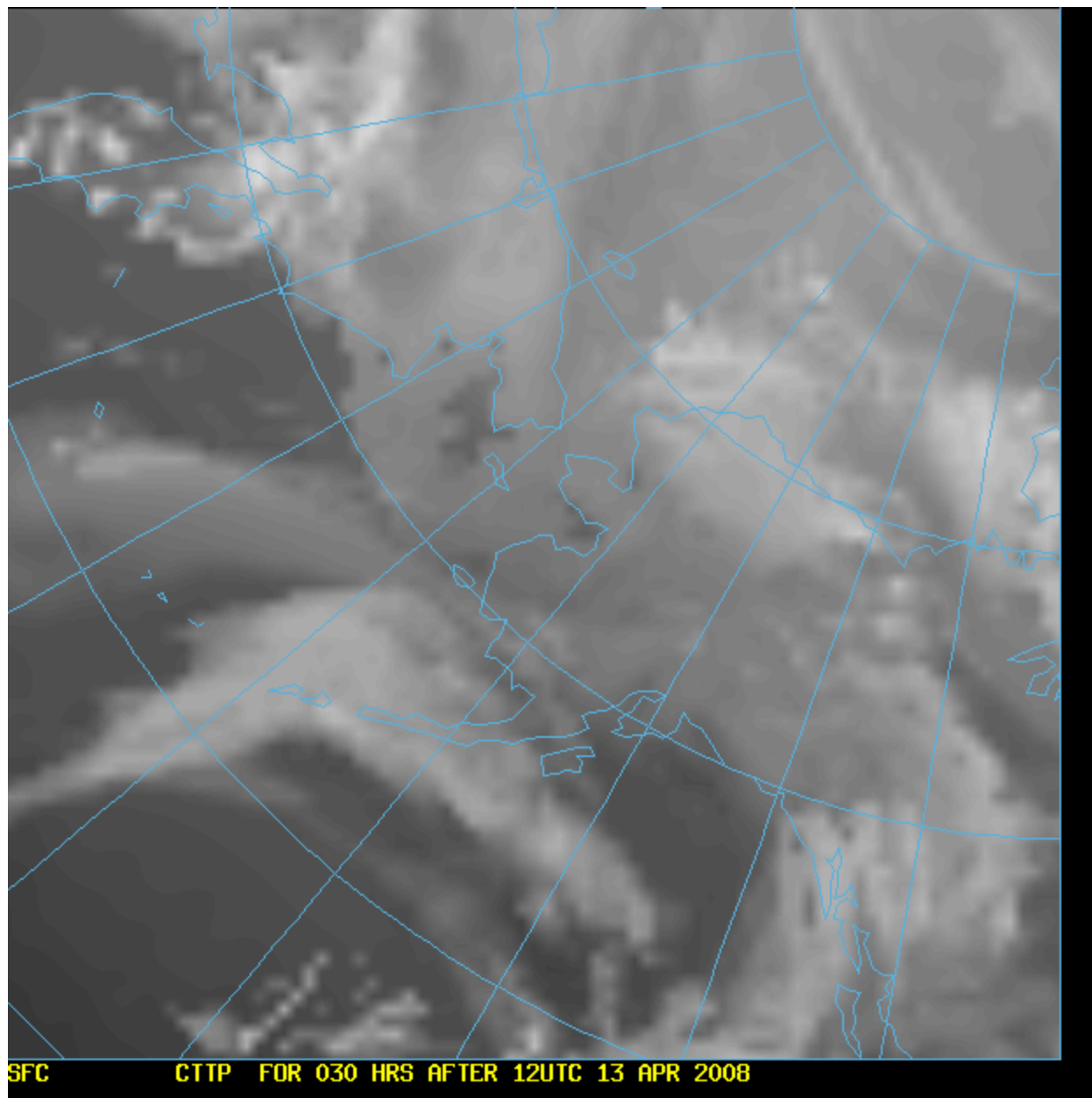
CRAS Synthetic ViS 06Z 04/14



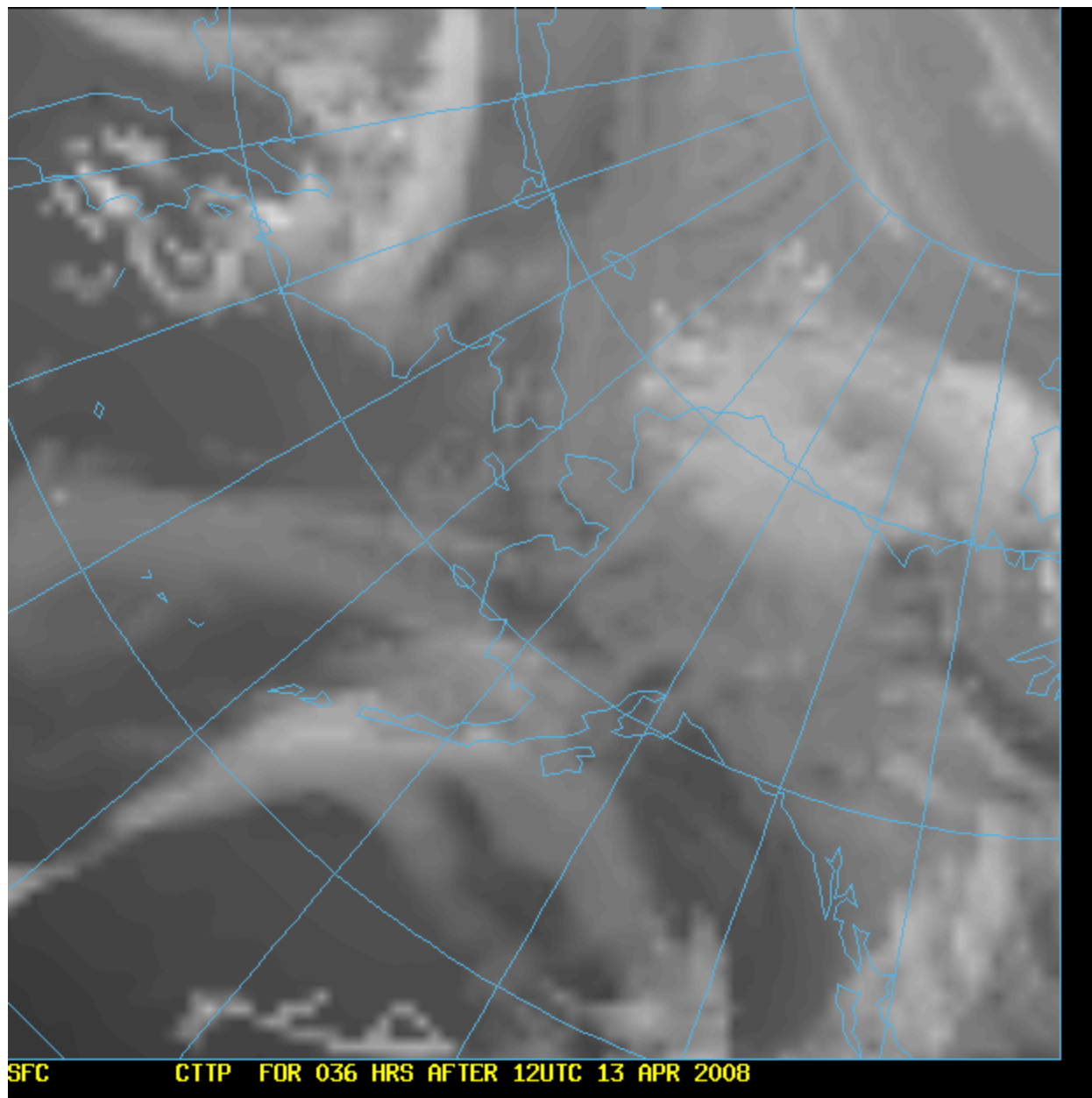
CRAS Synthetic ViS (4am LT Mon)

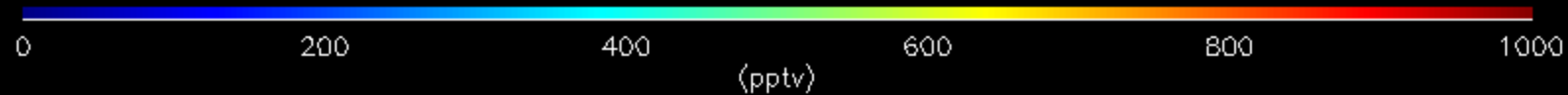


CRAS Synthetic ViS (10am LT Mon)

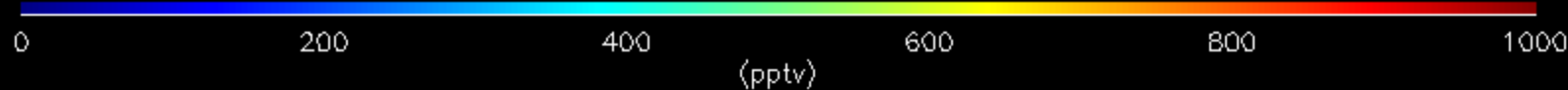
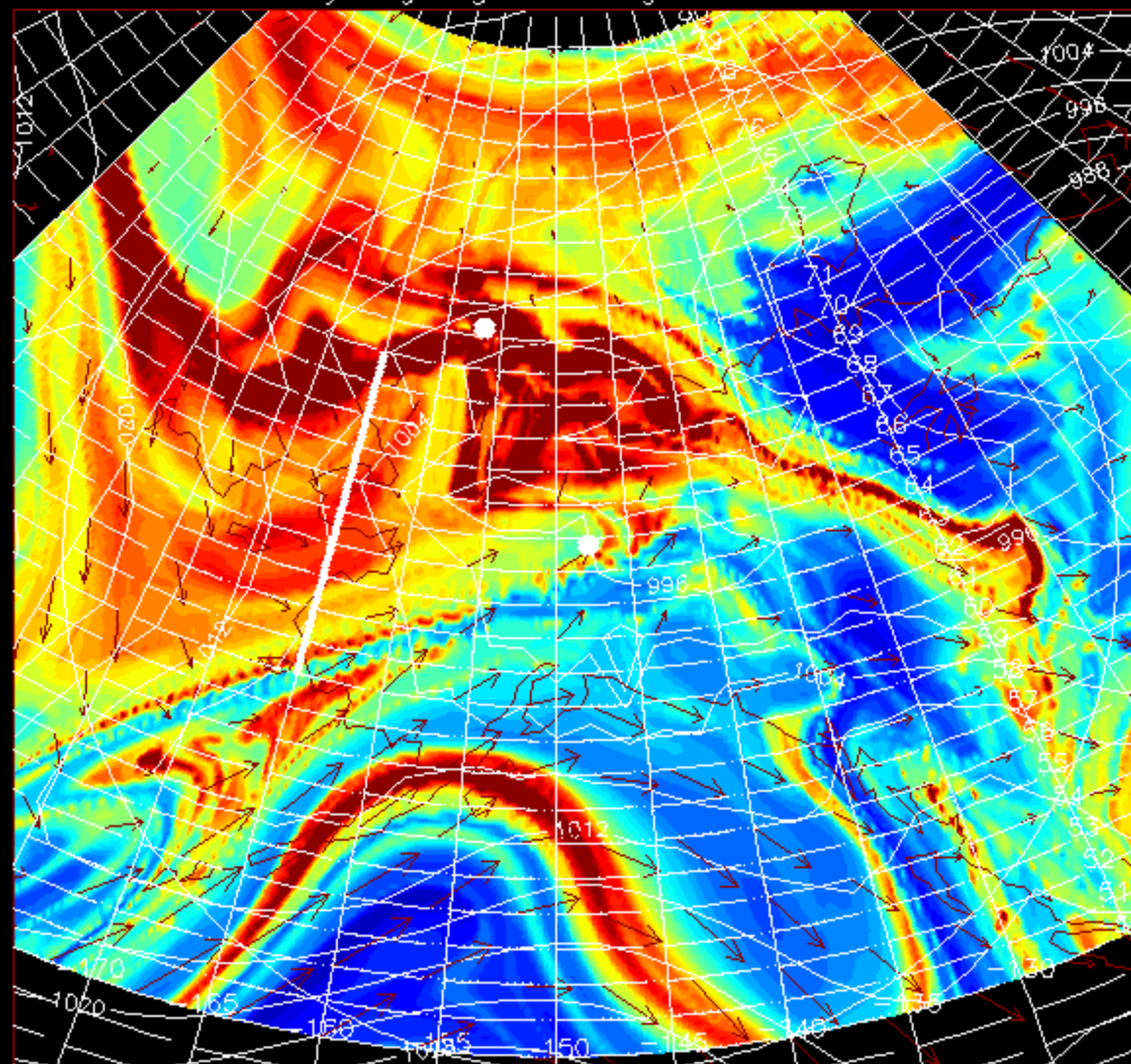


CRAS Synthetic Vis (4:00pm LT Mon)

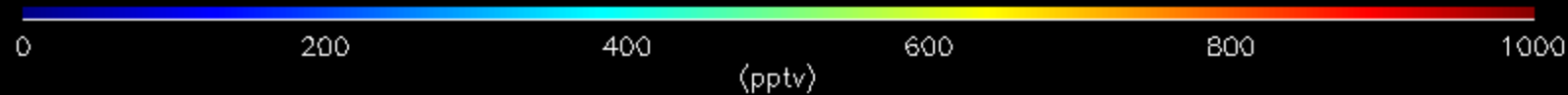
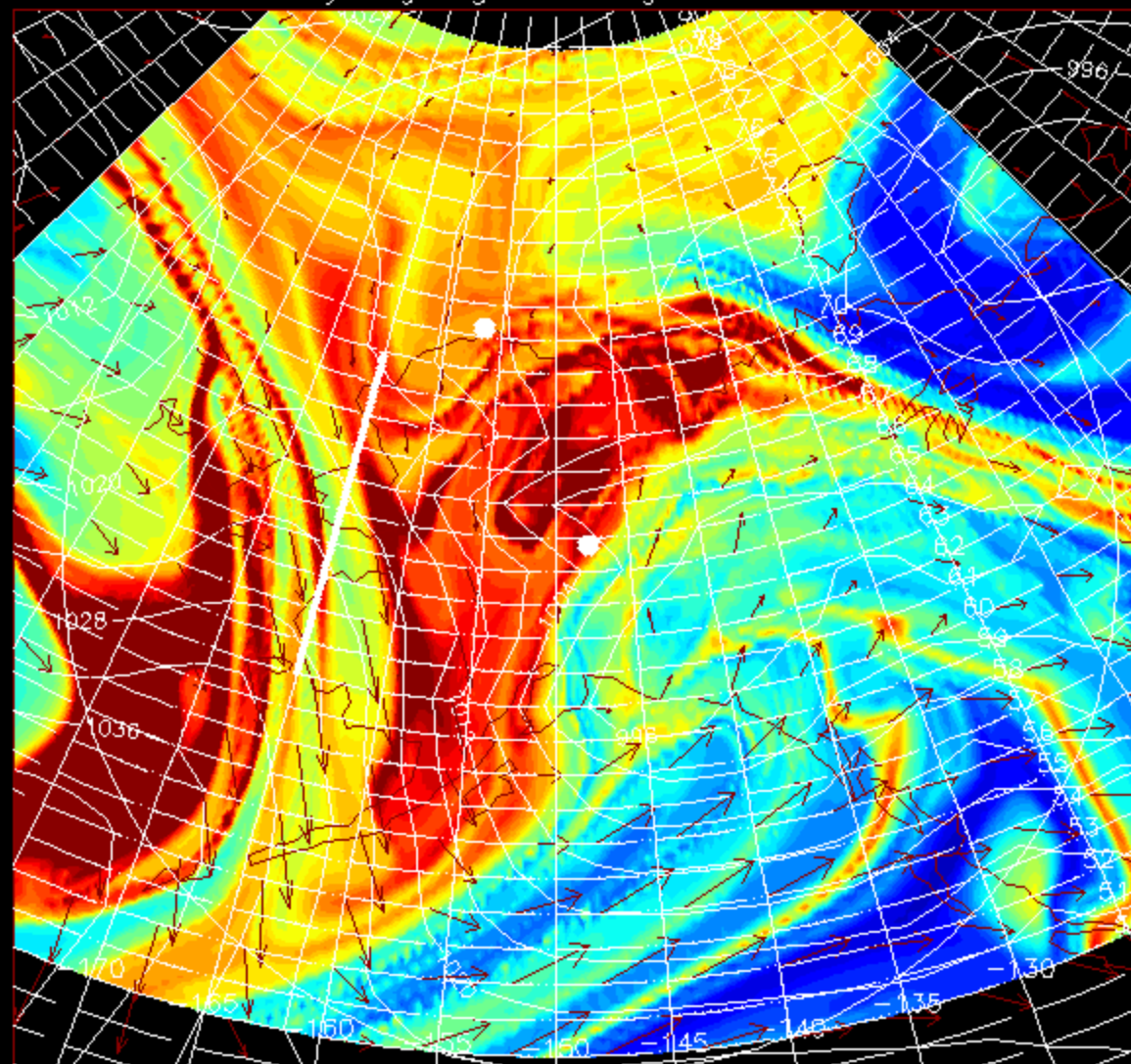




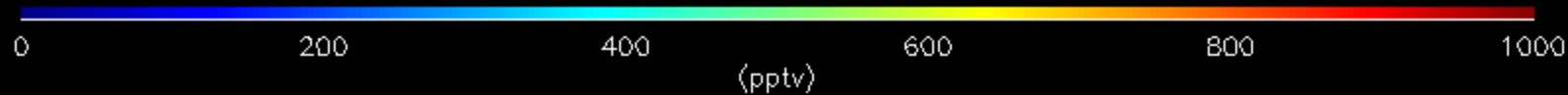
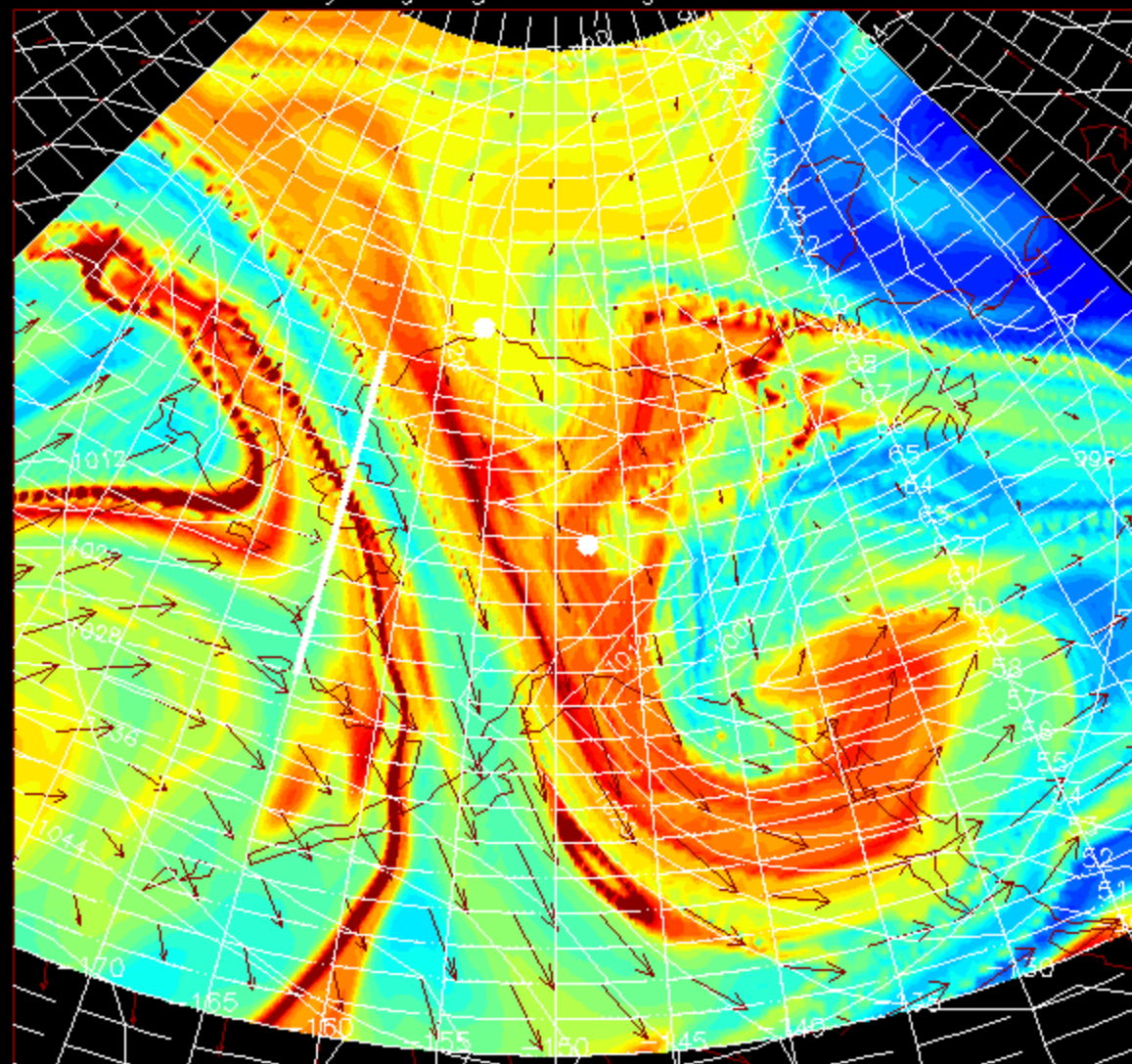
3km 5-day Lagrangian Averaged S04 2008041500



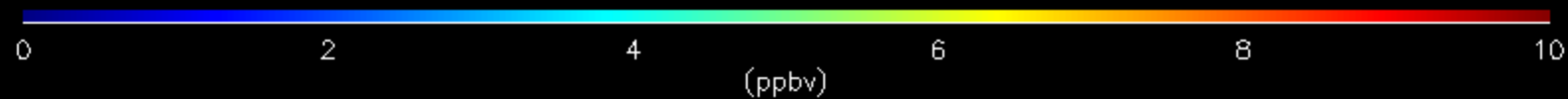
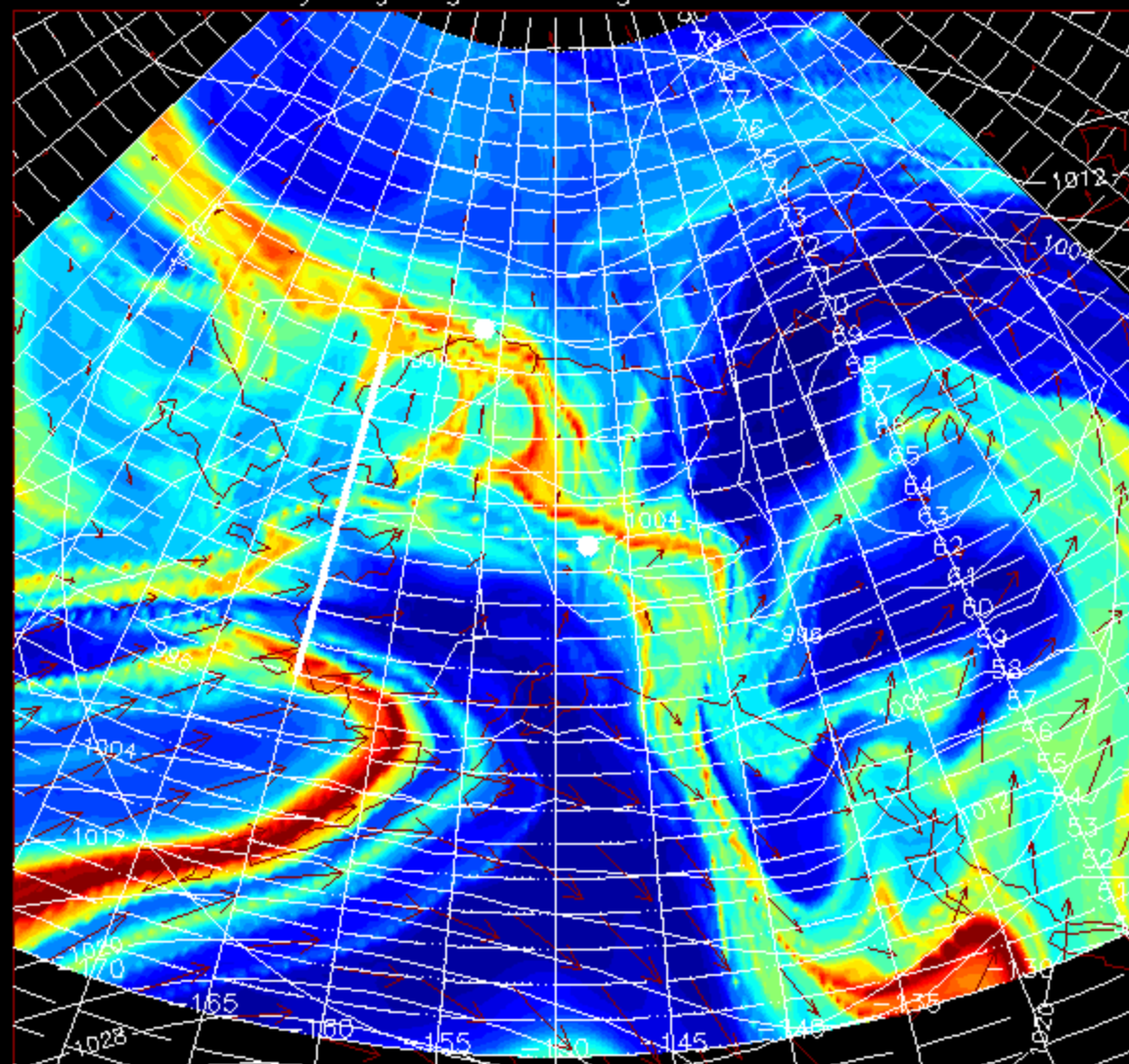
3km 5-day Lagrangian Averaged S04 2008041600



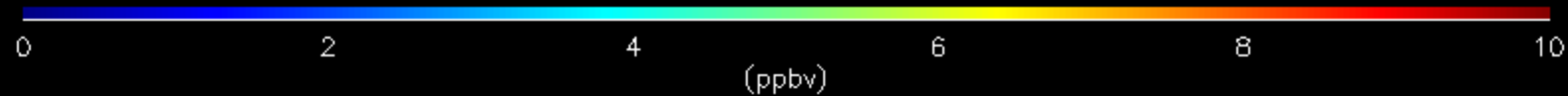
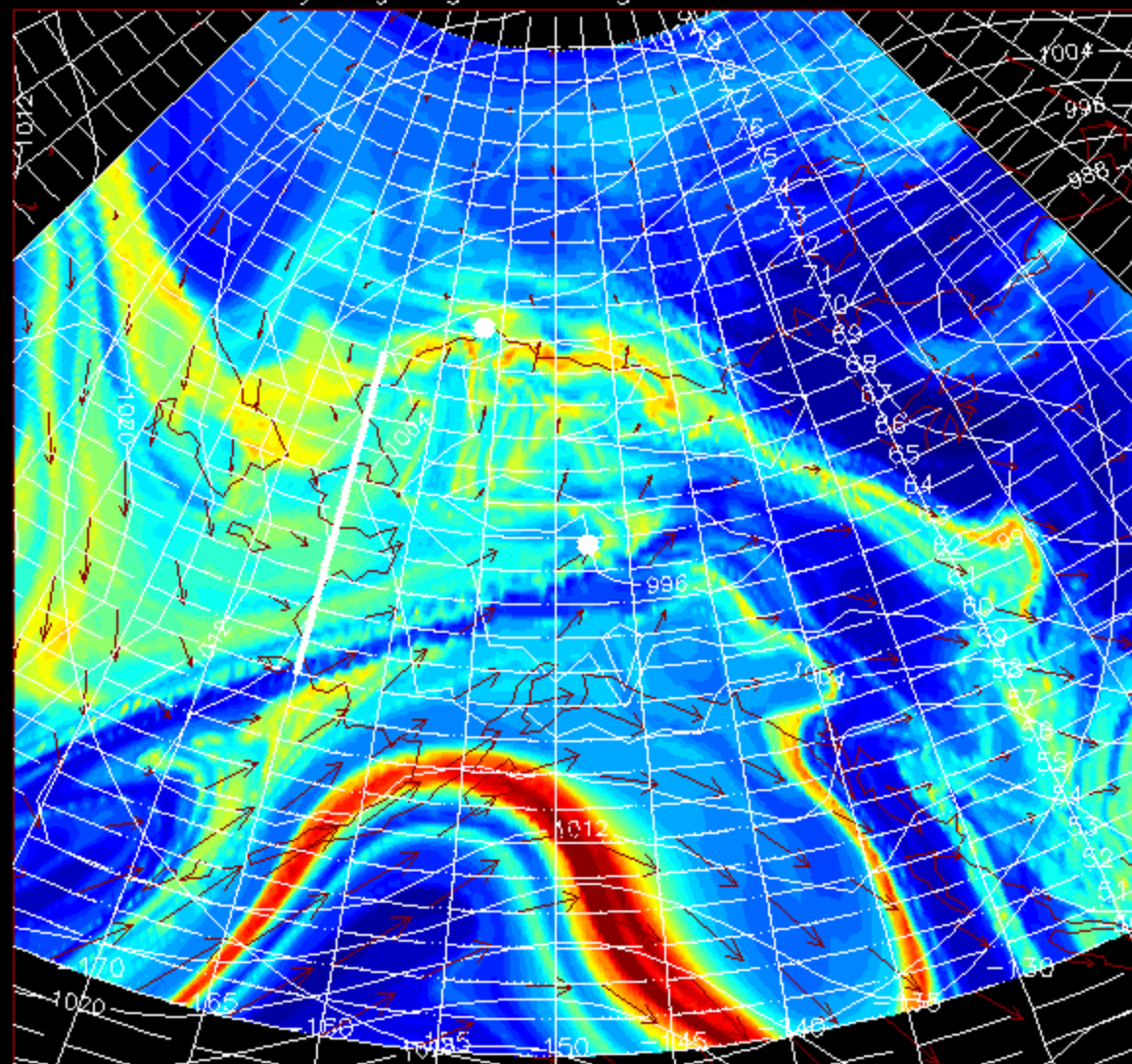
3km 5-day Lagrangian Averaged S04 2008041700



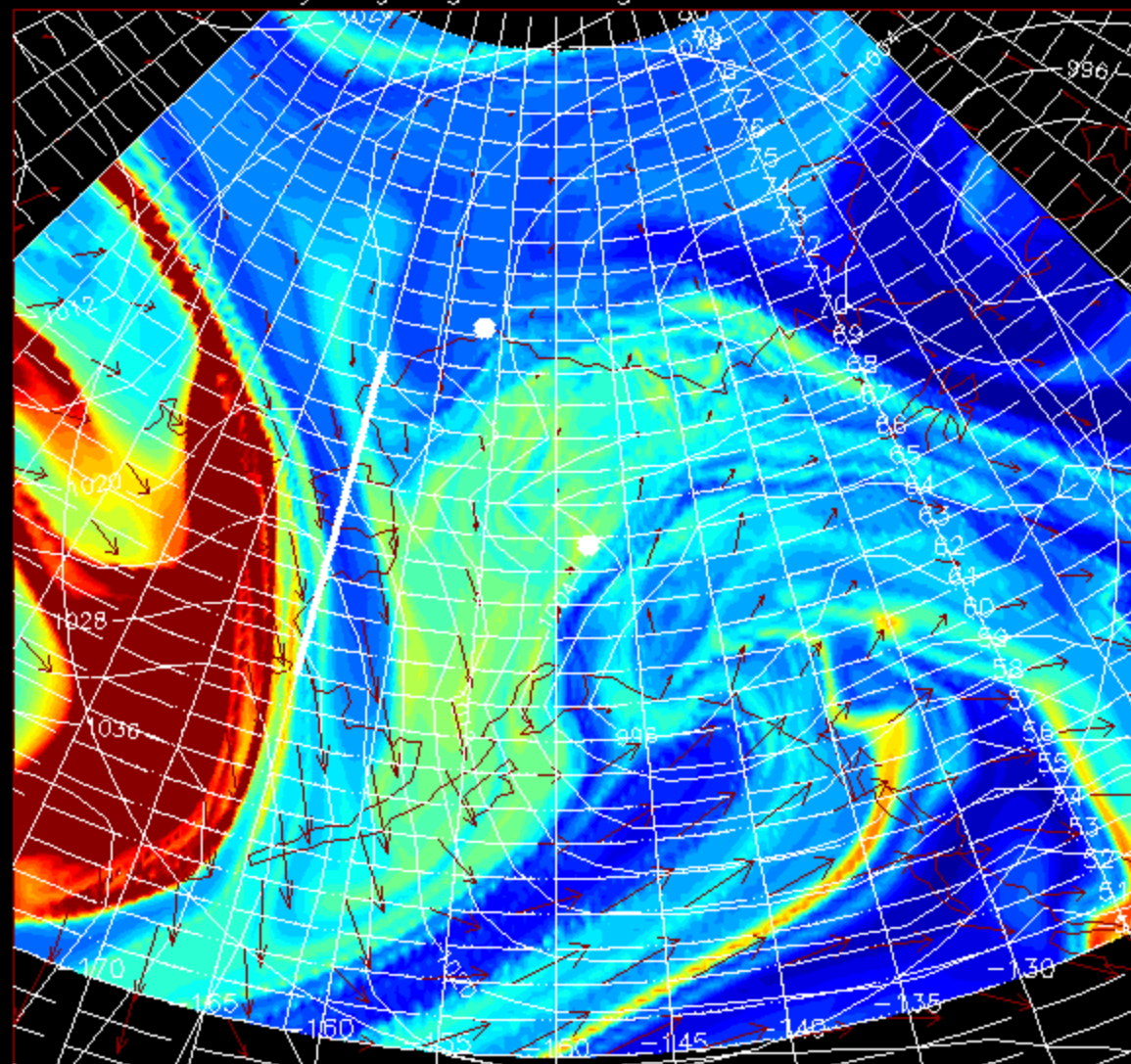
3km 5-day Lagrangian Averaged BC+OC 2008041400



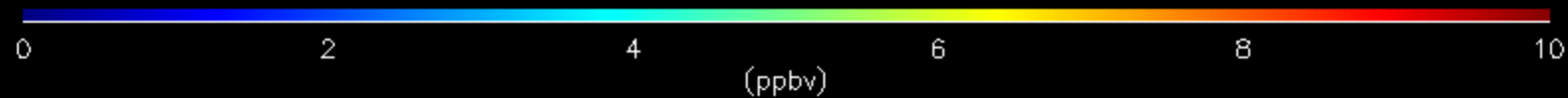
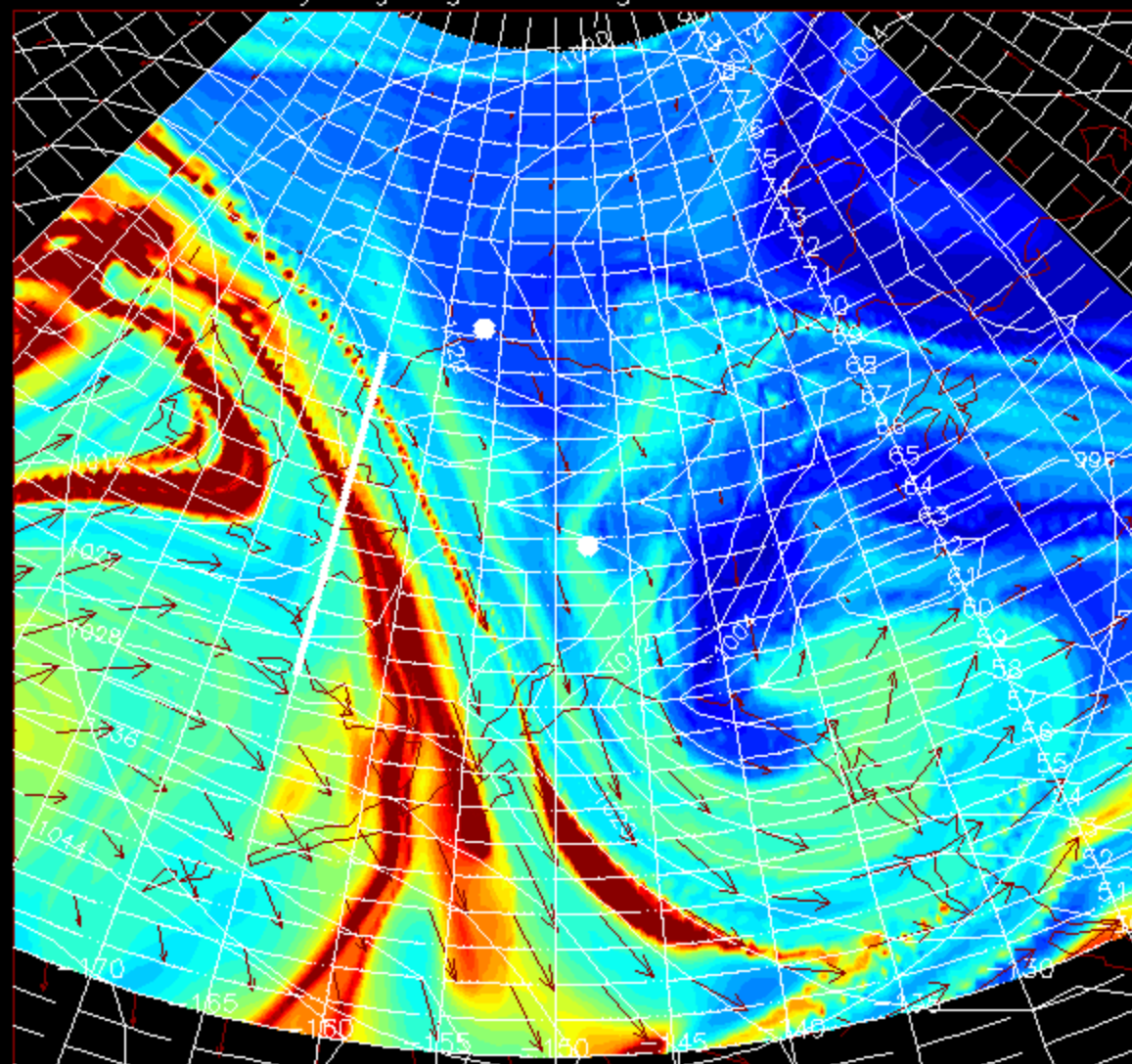
3km 5-day Lagrangian Averaged BC+OC 2008041500

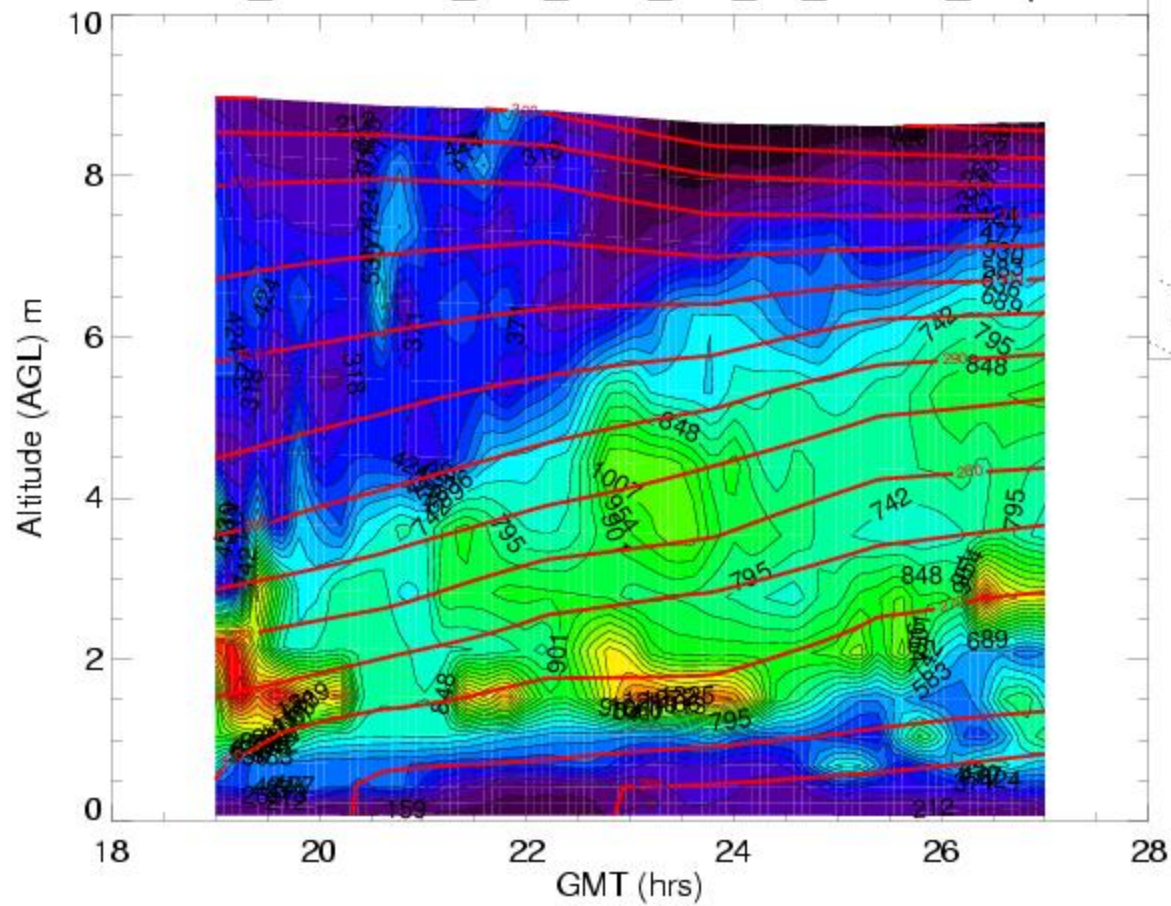


3km 5-day Lagrangian Averaged BC+OC 2008041600

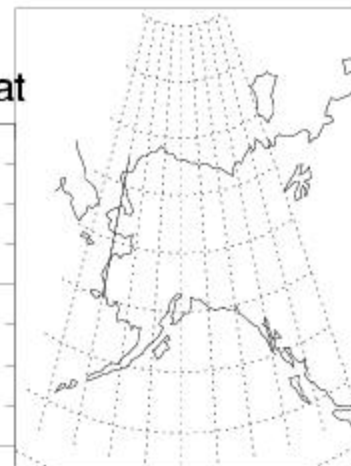
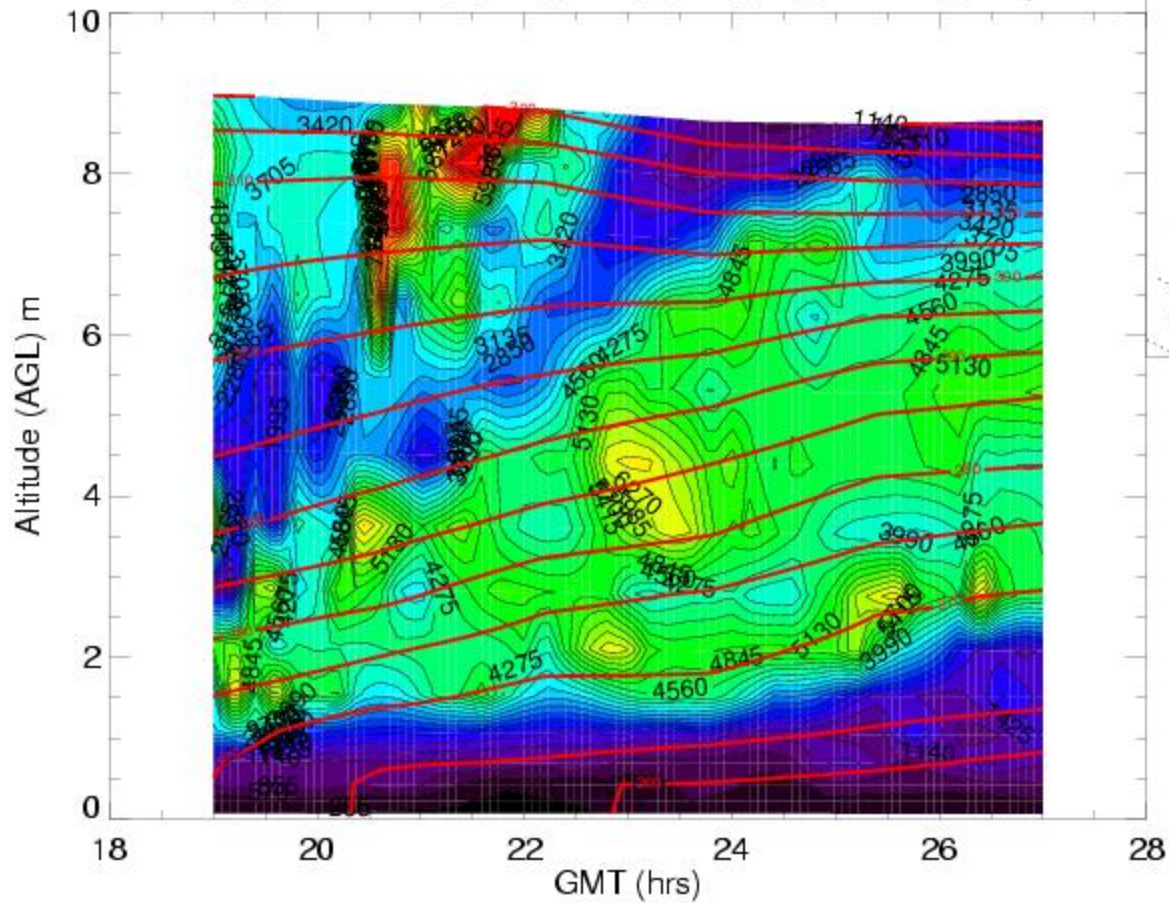


3km 5-day Lagrangian Averaged BC+OC 2008041700





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60hr FX ico CI= 5.00000 max= 295.025
RAQMS_20080415_00Z_60hr_fcst_rdf_curtain_arcpac.dat

